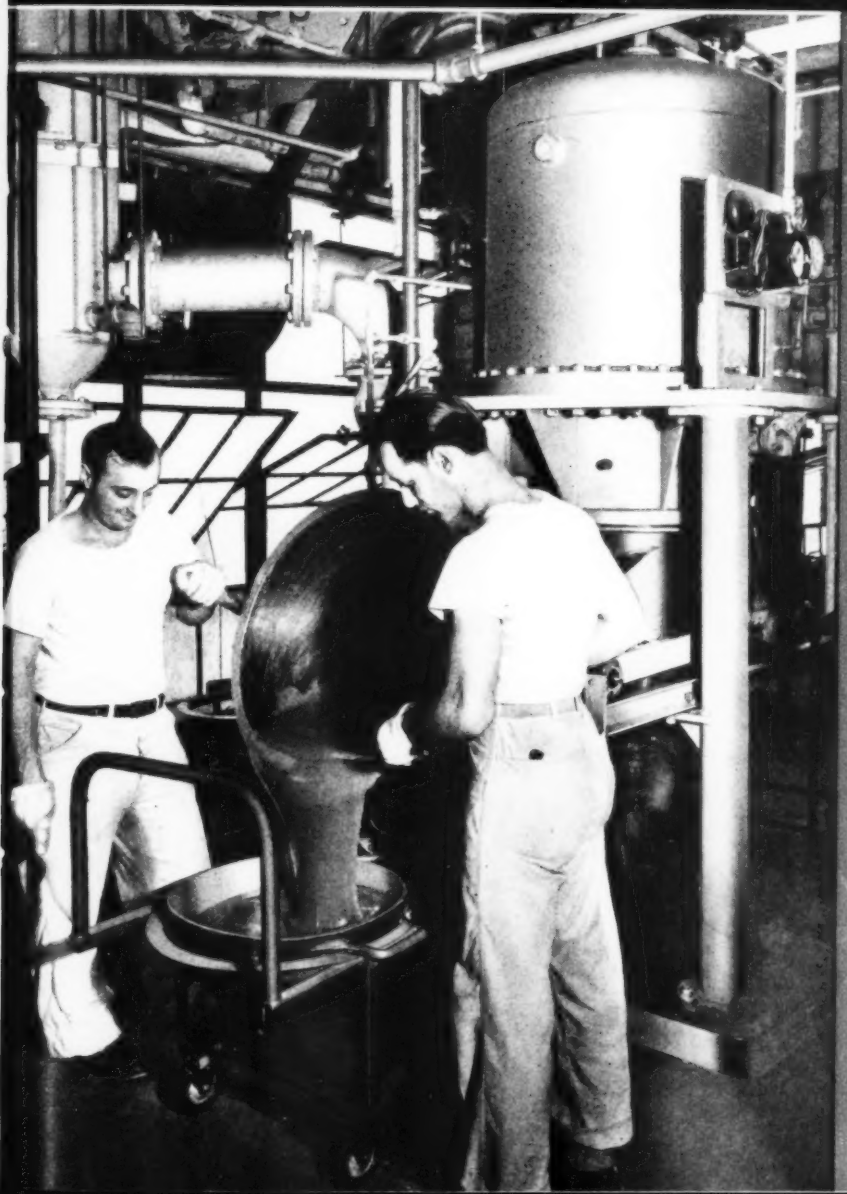
The Manufacturing Confectioner

ONEER SPECIALIZED PUBLICATION FOR CONFECTIONERY MANUFACTURERS



NCA Delegates Discuss Future of Candy Industry At 68th Annual Convention

Cooperation Between Finnish-U. S. Firms Aids Better Packaging

Cocoa Beans—Roasted Or Dried: First of a New Series of Articles

JULY
1951

What's the Value of a STERWIN CONTRACT?

ASK THE MAN WHO SIGNED ONE

No contracts are made in excess of our capacity to supply, barring strikes, government regulations, etc. Contracts enable us to properly organize and execute production. A Sterwin contract insures your supply of Zimco Vanillin within limits of your actual requirements.

Our distribution is handled by our own sales organization with district offices covering the entire U.S.A. A limited number of long established, recognized dealers also handle our Zimco Vanillin in bulk.

Flavor manufacturers are your best source of flavors in finished form ready for use in your products.

The same policies and procedures are applied in the sale and distribution of our Parakeet Certified Food Colors produced at our Cincinnati plant.

Write today for our latest Catalog.

ZIMCO® Vanillin USP

A Natural Source Vanillin

Consult your Flavor Supplier

Sterwin Chemicals INC.

SUBSIDIARY OF STERLING DRUG INC.

1450 BROADWAY, NEW YORK 18, N. Y.

445 Lake Shore Drive, Chicago 11, Ill.

Warehouse stocks: NEW YORK, CHICAGO, LOS ANGELES

Shipments made DIRECT FROM FACTORY: ROTHSCHILD, WISCONSIN

Additional sales offices: ATLANTA, DALLAS, PORTLAND (Ore.), RENSSELAER (N. Y.), ST. LOUIS, SAN FRANCISCO for shipping distribution

WORLD'S LARGEST SUPPLIERS OF VANILLIN

e

?

ply.
acts
ion.
illin

tion
ted
dle

s in

sale
lors

OH, BOY! PEPPERMINT!

UM-M-M-M-M . . . . . How they love it! . . .
That cooling, tingling flavor
of garden-fresh mint.
But to us, it's just another
good F. B. flavoring oil,
comparable in its excellence
to all the other specially fine flavors
that comprise the FRITZSCHE line.
To know that whatever flavor you choose*
will be just as good as flavoring science
can possibly make it,
is one of the great satisfactions
of buying all of your flavoring
requirements from FRITZSCHE . . .
A FIRST NAME IN FLAVORS SINCE 1871.

** Consult our catalog for complete selection.*

FRITZSCHE *Established* 1871
Brothers, Inc.

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

BRANCH OFFICES *and* *STOCKS: *Atlanta, Georgia, Boston, Massachusetts, *Chicago, Illinois, Cincinnati, Ohio, Cleveland, Ohio, *Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, *St. Louis, Missouri, *Toronto, Canada and *Mexico, D. F.* FACTORY: *Clifton, N. J.*

The Manufacturing Confectioner

READ WHEREVER CANDY IS MADE

JULY **1951**
Vol. XXXI **No. 7**

68th Annual NCA Convention		15
Cocoa Beans—Roasted or Dried?	J. Koch	20
International Cooperation Solves Packaging Problems	Clara Baldwin	23
Is Your Plant Boiler Safe	B. B. Stander	30
What's New in Candy Equipment		34
Patent Grants		40
Candy Making for the Beginner—Jellies	Alfred E. Leighton	47
Conventions and Meetings		50
Bi-Focal Specs	Dr. Kenneth Farrell	51
Candy Clinic—Gums, Jellies, Undipped Bars		53
Confectioner's Briefs		56
News of Associations		59
Supply Field News		62
Confectionery Brokers		64
The clearing house: classified advertising		66
Advertisers' Index		68

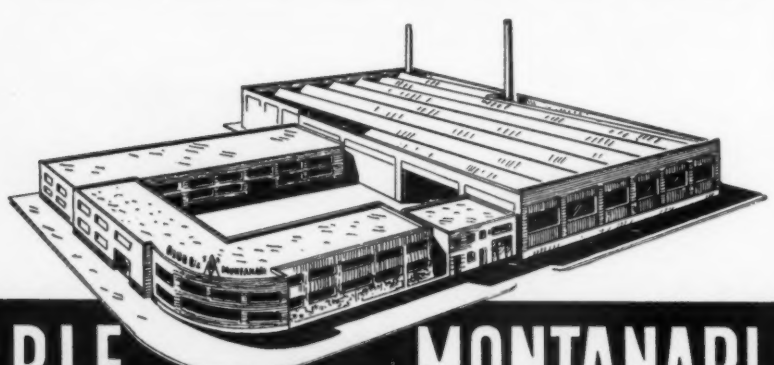
COVER: Cooked sugar is being discharged from one vacuum kettle of Continuous Vacuum Cooker while cooking is continuing in other kettle.

Published Monthly on the 5th by **The Manufacturing Confectioner Publishing Company**, publishers of **The Manufacturing Confectioner—The Blue Book—The Candy Buyers' Directory—Candy Merchandising.** Executive offices: 9 South Clinton Street, Chicago 6, Illinois. Telephone FRanklin 2-6369. Eastern offices: 303 West 42nd Street, New York City 18, N. Y., Telephone Circle 6-6456. Publication Office: Pontiac, Illinois.

Subscription price: One Year, $3.00. Two years, $5.00. Per copy, 35c, except September "Purchasing Executive Issue": $2.00. In ordering change of address, give both old and new address. Entered as Second Class Matter, April 20, 1939, at the Post Office at Pontiac, Illinois, under the Act of March 3, 1897. Member: National Confectioner's Ass'n, Western Confectionery Salesmen's Ass'n, National Candy Wholesalers Ass'n, Audit Bureau of Circulations. Foreign Subscriptions: One Year, $4.00. Two years, $7.00. Canadian Subscriptions: same as U. S.

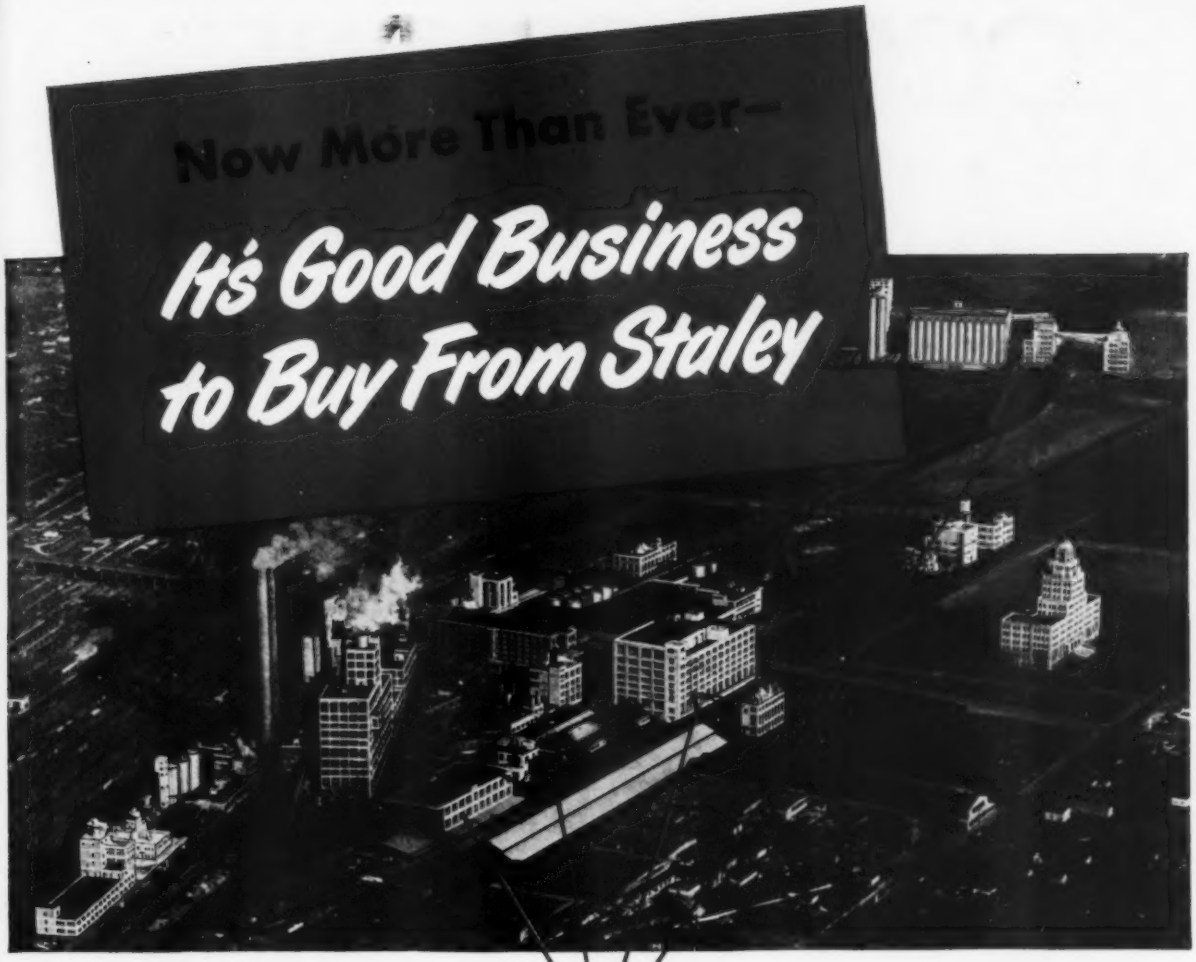
AUTOMATIC VERTICAL COOLER AVC/TIO

Embodying 60 trays of 27, 5/16" x 15, ¾"
Minimum encumbrance
Reduced consumption of cold units
Maximum labour economy
Simple construction, safe working
Simultaneous use of any type of mould
Automatic loading and unloading
Timing of freezing duration



S.A. CARLE & MONTANARI MILANO - ITALY

USA REPRESENTATIVE: CAESAR A. MASCHERIN—Room 702, 220 W. 42nd St., New York 18, N. Y.
CANADA REPRESENTATIVE: HAROLD DAVIS & CO.—824 Notre Dame St., West Montreal 3, Quebec.



More and more candy makers are learning this important fact . . . *"You can always depend upon Staley!"* And never have dependable raw materials been more important to your business, than today. Now is the time to discover the advantages of buying from Staley. The huge 400 acre Staley "factory-city" employing over 3000 people is your most dependable *single* source of supply. In addition, there is a full staff of trained Staley technicians ready and willing to help you with your candy problems. Call on them at any time without obligation.

Sweetose®

Staley's enzyme-converted sweetener brings these benefits to your finished products at LESS COST:

1. Prevents crystallization.
2. Retains moisture.
3. Improves flavor.
4. Adds sweet food solids.
5. Boils faster, whips lighter.
6. Costs less to use.

Staley's CORN SYRUP

Staley's Crystal 43 Corn Syrup Unmixed—a high quality standard Confectioners Corn Syrup.

1. Prevents crystallization.
2. Adds body.
3. Supplies food solids at minimum cost.
4. Dependable cooking characteristics.
5. Adaptable to all standard candy formulas.

Staley's LECITHIN

Staley's "Sta-Sol" Lecithin Concentrate, extracted from soybean oil, gives your finished products these benefits:

1. Faster mixing.
2. More complete mixing.
3. Less grainage with age.
4. Fresh flavor longer.
5. Improves moisture retention.
6. Reduces viscosity in chocolate coatings.

Staley's STARCHES

Staley offers you these improved confectionery starches:

COOKING STARCHES:

1. ECLIPSE "F"—medium fluidity—for firmer textured jellies.
2. ECLIPSE "G"—high fluidity—easy depositing—less string.

MOULDING STARCHES:

1. STANDARD-ordinary Corn Starch.
2. SPECIAL-recommended because it is almost dustless (treated with oil to reduce dust).

A. E. STALEY MFG. CO.

Decatur, Ill., U. S. A.

World's Largest Producer of Corn and Soybean Products

CONFECTIONERY ANALYSIS and COMPOSITION

By

STROUD JORDAN, M.S., Ph.D.

and

KATHERYN E. LANGWILL, M.S., Ph.D.

$3.50

The first two volumes of "Confectionery Studies" by Dr. Jordan, have acquainted the confectioner with everyday problems and with standards in effect at the date of publication. A practical and technical evaluation of chocolate products then followed entitled "Chocolate Evaluation". These three books were willingly received by the industry as valuable additions to the technical literature available.

This book, the fourth in the series, is being published by *The Manufacturing Confectioner*. Confectionery studies have been continued and this volume concerns itself, first with applicable data that cover the composition of basic raw materials as well as that of the finished confections in which they have been employed.

In assembling this volume reference is made to applicable methods. Where satisfactory methods of analysis are of general knowledge they are incorporated by reference. All specially developed methods and procedures are incorporated in detail.

Where reconstruction of formulas from analytical data is considered, we are dealing with a relatively unexplored field. Many basic assumptions have been made before actual formula reconstruction has taken place. The second part of this volume is used to consider the several confection groupings into which most confection types generally fall and full discussion of each follows. See Chapter Headings below.

Moisture (Ch. 1)
Ash (Mineral Matter—Ch. 2)
Sugars (Ch. 3)
Starches (Ch. 4)
Proteins (Ch. 5)
Fats (Ch. 6)
Colloidal Materials (Ch. 7)
Nuts and Fruits (Ch. 8)
Acids (Ch. 9)
Incidental Materials (Ch. 10)
Reconstructed Formulas (Ch. 11)
Hard Candy (Ch. 12)
Sugar Cream (Fondant Ch. 13)
Fudge (Ch. 14)
Caramels and Toffees (Ch. 15)
Marshmallow (Hard & Soft Ch. 16)
Nougat (Ch. 17)
Gums and Jellies (Ch. 18)
Coated Candies (Ch. 19)
Appendix

BOOK SECTION

The MANUFACTURING CONFECTIONER

9 S. Clinton St. **Chicago 6, Ill.**

Book Section:
THE MANUFACTURING CONFECTIONER
9 S. Clinton St., Chicago 6, Ill.

Please Bill Me .....
$ .....Cash Enclosed.....
For .....No. of Books.

Please send me Dr. Jordan's Book "Confectionery Analysis and Composition."

MY NAME .....COMPANY .....

POSITION OR TITLE .....ADDRESS .....

CITY ..... STATE..... ZONE .....

WHAT THE SPANGLER CANDY COMPANY OF BRYAN, OHIO, SAYS ABOUT LIQUID SUGAR

Our location away from the East Coast cane sugar suppliers has never been a handicap. In fact, the delivery of our Flo-Sweet Liquid Sugar is so regular and so prompt we could be right around the corner from the plant. This service has been of great satisfaction to us.

Using Flo-Sweet has meant regular, increased savings, too, because the Flo-Sweet method of delivery, handling and storage of sugar has cut manpower requirements to a minimum in this department.

NORMAN SPANGLER
Spangler Candy Company
Bryan, Ohio

WHEN YOU USE FLO-SWEET,® YOU GET IMPORTANT SAVINGS IN MANPOWER

When your sugar deliveries are to the kettle instead of to the curb, your sugar handling costs become sugar handling savings. The simple Flo-Sweet Liquid Sugar method of delivery, handling and storage keeps manpower requirements at a minimum and that saves you time, trouble, *and money*.

You just can't beat the fact that 3 clean mechanical steps replace 10 back-breaking storage and handling operations.

HERE'S THE SIMPLIFIED FLO-SWEET LIQUID SUGAR METHOD

1. **Receiving Department**—One man pumps Flo-Sweet through closed pipelines into your storage tanks.
2. **Warehouse**—With Flo-Sweet, there is *no* labor needed.
3. **Syrup Room**—Flo-Sweet f-l-o-w-s through sealed pipelines right into the process. One valve to turn—measured automatically—no contamination loss.

   Flo-Sweet also cuts processing time: no waiting for dissolving, always an even mix.
4. **Supervision**—With Flo-Sweet, a minimum, if any, supervision is required.

flo-sweet

Manufactured only by

REFINED SYRUPS & SUGARS, INC.

Yonkers 1, New York

PIONEERS IN LIQUID SUGAR FOR SAVINGS, SANITATION AND SERVICE

NCA members crowd the North Ballroom of Chicago's Stevens Hotel for the first session of the 68th Annual Convention, and 25th Confectionery Industries Exposition. About 4500 attended the events. James A. Farley and Major General Herman Feldman, U.S. Army Quartermaster General, were featured speakers on the general theme "Future of the Confectionery Industry in a Mobilization Economy."

Manufacturers Look to the Future At

68th Annual National Confectioners' Convention

OPENING the 68th Annual National Confectioners' Association convention at the Stevens Hotel, Chicago, on June 5, Philip. P. Gott, president of the NCA, told members that although candy consumption in 1950 had increased over 1949 levels, the industry faced increasing problems in the face of national mobilization. Gott stressed the place of candy in the national economy by pointing out that the industry had used approximately three billion pounds of agricultural products in 1950 alone.

Frank K. Gleason, vice president of E. J. Brach & Sons and chairman of the program committee, introduced the first panel discussion by asking, "How can we get more candy consumed?"

Accusing the candy industry of "too much complacency and not looking to the future," George H. Williamson, chairman of the board, Williamson Candy Co., told the members to "put themselves in the place of the consumer." Williamson asked if the manufacturers were keeping up their quality standards, or whether they were't trying to cut costs by substituting inferior ingredients. "The candy consumer can't be kidded," he said, emphasizing that the product must please the customer or he won't buy.

Poor organization and cooperation within the industry was charged by Bob McCormack, Sr., president of Bob's Candy and Peanut Co., who stated that the industry must either progress or retrogress. He noted the lack of display space given candy in grocery stores in comparison with other items and suggested that it might have a good deal to do with the falling volume of business.

Irvin C. Shaffer, vice president of Just Born, Inc., vigorously proclaimed that the problem was to "Get more people to eat more candy!" Shaffer declared that the industry must let the world know that candy is a healthful, energizing food. He stated that the successful manufacturer is the one who offers the best and the most, for the least. Shaffer stressed that the industry's fight, is a fight for survival—which, in the face of present downward trends, must be carried on harder than ever. He noted the interdependence of the individual manufacturers and the group, emphasizing that "what is good for one is good for all" and vice versa.

A note of optimism was sounded by Cecil H. McKinstry, president of the Imperial Candy Co., who said that consumption of candy on the Pacific coast was up. He pointed out that the survey of consumption made by the Department of Commerce did not include the figures of a number of large manufacturers and therefore did not give a true picture of the situation. He added that the problem facing the industry was one of proper merchandising, and asked for more cooperation and exchange of ideas among the manufacturers.

Victor H. Geis, vice president of Mars, Inc., charged that sales and promotion methods in the industry have not kept abreast of the times. He said that the manufacturers should conduct consumer, products and marketing research projects to back up their sales and promotion campaigns. Geis stated that the industry was not carrying its sales program through to the retail level and advised that the money now being spent on "free

deals" and bonuses should be spent on "constructive selling, rather than destructive competition."

Following the panel discussion, Richard N. Heath, executive vice president of the Leo Burnett Co., Chicago, told the members that they individually must take one of two competitive courses in the future: either by maintaining quality through brand franchise, or by lowering quality and price. Heath produced a number of prepared slides and graphs to illustrate his point. He pointed out that total food consumption has changed very little in the past ten years. The charts showed that sugar consumption was up 33% from 1909, but the present consumption was primarily in the fruit juice, ice cream and soft drink lines which have advanced considerably during the past ten years. He blamed the candy sales loss on the competition offered for the youngster's nickles by soft drinks, cigarettes and ice cream; and the opposition to candy consumption of the PTA's, dentist groups, and nutritionists, who claim that candy is fattening.

The Hon. James A. Farley, Chairman of the Board, Coca-Cola Export Corp., addressed the N. C. A. at the opening luncheon. Mr. Farley's subject, "Reaching the Hearts and Minds of Men," was especially appropriate for a nation-wide gathering of men engaged in the candy business. "All of us are working toward this objective, whatever may be our mission or profession. If we are selling goods, we must win confidence. There is also the problem of keeping people who are voting for you in business kindly disposed toward you." Mr. Farley stated, "Many movements in politics have been carried through to success on the basis of a single phrase." Perhaps, Mr. Farley had seen the slogan, "Candy is delicious food."

The Tuesday evening Production and Sanitation Session was well attended and of interest to all. After the showing of the film, Paperboard Packaging," sponsored by the Continental Paper Co., which vividly portrayed the manufacture of paperboard and the fabrication of packages, Mr. Charles Scully introduced the Sanitation Director of the N. C. A., Mr. Gerald S. Doolin. Of the plans made in 1944 by N. C. A., the sanitation program has proven to be the most successful. Instituted in 1946, this program has been beneficial in two respects, (1) the effect on public officials that the confectionery industry recognized the need for sanitation and was endeavoring to educate individual plants, and (2) the effect on the workers in the plants as a result of correct methods of instruction.

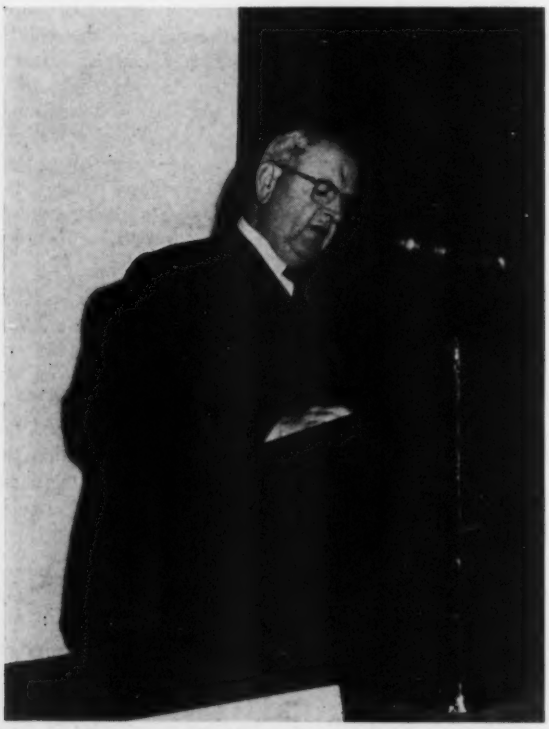
Mr. Doolin has made 393 plant visits and held 39 meetings since 1946. This service is free. Sanitation briefly expressed means "clean." Colored slides showing exaggerated examples of various types of inspections or surveys were impressive. "The entire sanitation program depends upon active management support and interest," Doolin concluded.

G. Lloyd Latten, stated that labor is our biggest problem, and introduced Mr. Don F. Copell, Chief Engineer, Wagner Baking Corp., whose talk, "Modern Approach to Cost Reduction" offered a means of solving this perplexing matter.

The elimination of waste manpower and simplification of work to make it easier are underlying philosophies. Much emphasis has been given to time and motion studies. There is always the human element to be considered and Mr. Copell stated that most of us resist change, new ideas and criticism. A film on this subject taken by General Motors Corp. illustrated these points. It takes study and effort to find and sell employees on easier and faster methods of production, but this is essential in these days when "frills" amount to 15% of the payroll.

"Shortages of Raw Materials and Alternates" was the subject of Mr. James A. King, Vice President, Nulomoline Div., American Molasses Co. This talk summarized the information obtained from 42 supply firms and manufacturers. Confusion exists as to the supply situation but in general the following statements hold true.

Expansion of one citric acid producer will help to ease this ingredient. Chocolate coating will be relatively in tight supply through October. An improvement in supplies of lemon oil is expected, though when, is questionable. Orange oil production is being stepped up. Anise, cinnamon, cassia, and clove oils being imported are short and synthetics offer a means of replacement. Vanillin production should be ample to mean normal consumption demands. Propenyl Guaicol is offered as a powerful flavoring material and as an extender for other flavorings. There is no satisfactory replacement for Maraschino-type cherries. Cherry crops are low and cherry halves may be used to a large extent. Gelatin is not expected to be in short supply. New types are available, of which, a low viscosity type of 225 Bloom offers promise for use on continuous marshmallow beaters. The water soluble gums being imported for the most part, may be short. Milk products are in plentiful supply. Albumen, fresh or frozen egg whites, and vegetable whipping compounds should be available. Coconut is plentiful. Pectin inventories are depleted but there should be no shortages. Corn syrup, starch and sugar are in plentiful amounts. The information presented by Mr. King was quite encouraging.



Fred W. Amend, Chairman, NCA, Quartermaster Specifications Committee introduces talk by Dr. Kenneth T. Farrell.

er the
sored
ed the
pack-
n Di-
plans
n has
, this
) the
dustry
oring
n the
ds of

meet-
riefly
g ex-
ns or
gram
rest,"

prob-
ineer,
ch to
rplex-

cation
phies.
stud-
dered
, new
Gen-
study
faster
days

s the
noline
d the
nanu-
n but

ease
ly in
sup-
stion-
Anise,
short
nillin
ption
l fla-
rings.
-type
ay be
be in
low
e on
gums
Milk
rozen
hould
s are
yrup,
orma-

ONER

C
S
p
M
C
p
s
r

C
N

W
H
f
s
W

A
A
d
b
t
i
p

D
A
c
p

(
T
h
l

COCONUT NEWS & PREVIEWS

By Charles B. de Mayo
Mgr. Franklin Baker Laboratories

and Max E. Ruehrmund
Mgr. Franklin Baker Industrial Service Laboratory

COCONUT SUPPLY

Shipments of dessicated coconut in May, 1951, were down from May, 1950. 8,830,000 pounds of dessicated coconut were shipped from the Republic of the Philippines in May of this year. The comparable figure for May, 1950 was 14,017,000 pounds. Cumulatively, during the first five months of 1951, shipments totaled 35,046,000 pounds versus 54,077,000 pounds for the similar period last year. Nevertheless, sufficient supplies of coconut are available in this country for all normal requirements.

COSTS

Nut costs during June were showing a weak tendency.

WARM WEATHER CANDY—SHORT NOUGAT

Here's a cool, colorful piece of warm weather candy that has a distinctive coconut flavor background. Short Nougat is tops in consumer appeal, and is an uncoated summer item which can be made with either Toasted Coconut or Gem Philippine Coconut. Write for formula.

A TYPHOON NAMED IRIS

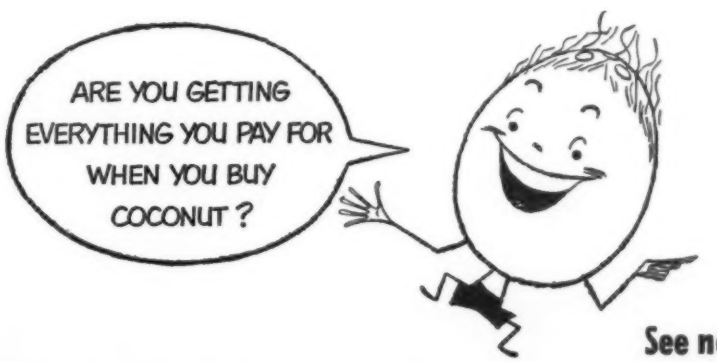
A typhoon named Iris paid an early call to the Philippines recently, causing severe damage in the coastal areas of Luzon. Winds up to 110 mph stripped flowers and budding nuts from some of the coconut trees, causing an estimated 10-15% loss in the next ten months' harvest. However, since the crop was a bumper one, no shortages in raw materials will occur. Early warnings of Iris' imminent arrival spared possible serious damage to Franklin Baker property and plant machinery.

DEMAND FOR COCONUT AMONG SERVICEMEN

At the NCA Convention in Chicago during the week of June 3, it was stated at one of the sessions that servicemen are asking for more and more top-quality candy, particularly coconut bar candy.

COCONUT PRALINES

This New Orleans specialty is a year-round favorite. It consists of a blend of brown sugar and coconut, beaten and cast. The addition of creamed coconut helps keep it fresh and gives it that "just made" look. Write for formula.



See next page

MAGNETS, MAHOGANY PLUNGERS, AND 6-PLY BAGS

The Roles They Play In Bringing You Coconut . . . Why You Can Be Sure It's Fresh And Pure

Any lapse in the purity or quality of the coconut you use in your candy pieces could mean disaster to your sales.

Yet coconut is a very delicate food which is highly susceptible to spoilage unless special care is taken in processing and packaging to protect it.

During the past few months, these articles have been describing the *ideal* processing plant in which definite protective steps are taken to keep the coconut fresh and pure beyond any question.

Protection Through Magnets

For example, every operation affecting the coconut from the time it is cut or shredded until it reaches you is carried out by sanitary, speedy, up-to-date machinery. Spotless machines carry it through the drying process which seals in fresh flavor. Clean metal screens sieve it to achieve greater uniformity of particle size.

After sieving, the coconut is fed through sanitary chutes into stainless steel hoppers. On its way through, it tumbles over a series of magnetic plates—your protection against foreign metallic material.

Assurance Of Full Measure

The hoppers rest on delicate scales which are tended by men whose sole duty it is to make certain you get full and accurate measure. When exact weight is attained, the coconut falls into stainless steel beds which are exactly the length and width of the bags the coconut will fill.

The ideal shape of the shipping bags, and thus the ideal shape of the coconut that will fill them, has been determined by extensive testing. The proper shape of the coconut is automatically assured each time.

It's In The Bag

A mahogany plunger slips into the bed horizontally, sliding the coconut gently out and into the bag, which is fastened to the other end of the bed to receive it.

The bag is check-weighed to give you double assurance of full weight, then travels on a moving belt to the sewing machines which sew up the open end. The sealed bags are loaded immediately into freight cars. The coconut is never shipped in the excessive heat of the normal Philippine day, but when the tropical sun goes down and the air cools, the train carries its cargo to the Manila docks for transshipment to this country.

6-Ply Protection

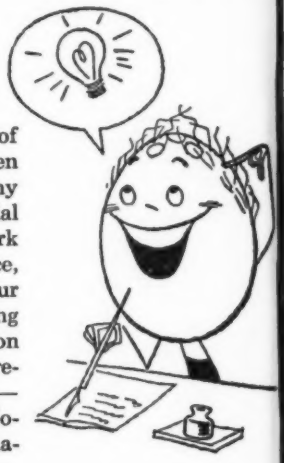
We will conclude our tour through the ideal Philippine coconut processing plant with a few words about the special bags used to ship the coconut. In 1939, a 6-ply heavy paper bag was developed in our plant which was a much-needed improvement over the old wooden cases which had been used up to that time.

Because it was airtight, moistureproof, sanitary, and kept the fresh coconut fresh, this bag has now been adopted as the standard package for the entire coconut industry.

Headquarters For Coconut

The ideal plant which developed this bag and is still improving on it is, of course, the Franklin Baker plant in San Pablo, Republic of the Philippines. Here, coconut experts utilize the finest in modern equipment and the latest protective developments to produce coconut that is always pure, always fresh, always *just right!* That's why, today, Franklin Baker is the headquarters for coconut.

Got An Idea?



Candy manufacturers are full of ideas for new pieces, but are often too busy to develop them. Why not let Franklin Baker's Industrial Service Laboratory help you work them out—in strictest confidence, of course. Or perhaps some of our formulae may suggest something that will fit into your production line. Our technical service representatives are at your service—*free!* Write Franklin Baker, Hoboken, New Jersey, for information.

HEADQUARTERS FOR COCONUT, FRANKLIN BAKER DIVISION, GENERAL FOODS CORP., HOBOKEN, N. J.

A type of coconut for every confectionery need. Complete line includes the following famous brands:

Gem Philippine Coconut *(10 varieties)* **Golden Toasted Coconut** *(7 varieties)*

Tender-Fresh Coconut *(4 varieties)* **Baker's Creamed Coconut** *(2 varieties)*

Pure

ippine
ut the
6-ply
ch was
cases

y, and
been
oconut

is still
plant
coco-
nt and
oconut
right!
arters

Speaking on "Current Trends in Contract Negotiations" during the forum on "Employer-Employee Relations", E. R. Bartley, personnel director for Bunte Bros., pointed out that labor is continuously striving for larger gains. He explained that the rising cost of living since the fight in Korea is a big factor in present and future negotiations. One trend that could be expected, he said, due to the longer work week necessitated by rearmament, would be demands for a shorter week at the same pay. Bartley charged that in many instances the unions are stalling on contract negotiations with the hope that the 10% formula will be eased in the near future. He also pointed out that many new contracts contain an "if" clause covering wage boosts, "if" approved by the wage stabilization board. Bartley cited the cooperation between many employers and employees and concluded that "good labor relations is good business."

The government's viewpoint on wage stabilization was presented by Samuel Edes, general counsel for the Wage Stabilization Board. Edes told the members that direct controls were necessary to halt the inflationary trends of the times. He stated that wage controls make at least three vital contributions to the overall economic stabilization program: first, by minimizing competitive bidding for labor when labor markets are tight; second, by maintaining the normal wage and salary relationships among various groups of workers; and third, by buttressing price controls. Edes reported that in many cases the board had found wage increases had been made in anticipation of future manpower problems, while on the other hand some companies were depressed and had given no wage increases. He explained that the wage freeze had stopped this "intense and chaotic movement" in its tracks. He added, however, that it is a mistake to think of the 10 per cent figure as the ceiling beyond which wages cannot rise. He cited instances in which wages could be increased above the ceiling, but stressed the need for caution by employers, pointing out the severe penalties written into the regulations.

Dr. J. G. Woodroof, Georgia Agricultural Experiment Station delivered a paper on "Cold Storage of Candies, Nuts and Peanuts." This was in two parts, (1) the storage of nuts, and (2) the storage of candy. Shelled and unshelled nuts were (a) held in common storage at room temperature and (b) held in refrigerated storage at 36 F. and 65 to 70 percent relative humidity, for periods as long as 64 weeks. At specific intervals, some nuts were withdrawn and made into candies. Results showed that (a) refrigeration was remarkably effective in preserving the fresh color, aroma, and flavor of peanuts and pecans; (b) the superiority in color and flavor of unshelled nuts over shelled nuts when held in either refrigerated or common storage was very marked; (c) of the five kinds of nuts used, Stuart pecans had the shortest storage life, Texas seedling pecans, Spanish peanuts, Virginia peanuts had a longer storage life, and almonds had the longest storage life. The scoring of nuts is more precise than the scoring or grading of candies made containing these nuts. Peanuts and pecans should age about two months prior to being placed under refrigeration. Storage at 28 F. was found an excellent way to dry nuts. Candy should be kept at about 48 F. or below to reduce staleness, rancidity, etc. Ideal storage is at 45 F. and 50 percent relative humidity. Stock piling of candy is satisfactory for three to 12 months provided there is adequate air circulation.

G. Lloyd Latten opens evening session on "Candy Production in a Mobilization Economy", while speakers Don F. Copell and James A. King look on.

Dr. L. F. Martin, Head, Bureau of Agriculture and Industrial Chemistry, U. S. D. A., New Orleans, spoke briefly on "Recent Developments in Candy Research." Research conducted at the Southern Regional Research Laboratory has been directed toward the solution of problems arising in the use of candy in rations. This has been conducted in close cooperation with the Food Laboratories of the Quartermaster in Chicago. A major objective is the development of candies of every sort to meet the severe requirements of the armed forces in distant fronts.

A number of antioxidants are capable of extending the resistance of butter in butter creams and caramels to deterioration. It is desirable to include butter in some types of candies for ration use. Rancidity resulting from chemical change in both animal and vegetable fats cannot be controlled by antioxidants and a search for stabilizers is being made.

Emphasis has been placed on a study of new agricultural products as candy ingredients. Experiments are being continued with soy protein, yeast and oat flour products. A dry sweet whey has given good results as an ingredient of a cast caramel. It has also been tried in fudge and nougat. Sorbitol has been used to improve the moisture retention and prolong the storage life of fudge. It improves the quality of pectin jellies.*

For the coming year, top priority will be given to specific problems of importance to the improvement of the delivered quality of candy items for our fighting forces.

An address pointing out the similarity of purpose of the candy industry and the Armed Forces was presented by Dr. Kenneth T. Farrell, Chief, General Products Division, Quartermaster Food and Container Institute. (This address will be found on page 51 of this issue.)

At a special Traffic conference during the convention, traffic managers reported to the manufacturers on the special problems and aims of the traffic departments in the candy industry.

(*Please turn to page* 26)

* (Editor's Note—Please refer to How to Extend Shelf Life in Confections by Justin J. Alikonis, THE MANUFACTURING CONFECTIONER, Vol. 31, No. 6, 1951).

COCOA BEANS--

Roasted or Dried?

By J. KOCH

IN his well-known book, *Handbuch der Kakaoerzeugnisse'*, Dr. H. Fincke suggested that an arbitrary dividing line might be drawn between roasting and drying of cocoa beans according to whether the beans were heated to a temperature of above 100 deg. C. in the process or not; another possible critical temperature which can be suggested is 119 deg. C., the boiling point of acetic acid, for acetic acid is always eliminated in appreciable quantities during the process, as is readily observed if the exhaust gases from a roaster or drier are passed through a condenser. Neither temperature is, however, truly critical, for there is no sudden change observable in the rate of roasting at any temperature short of that at which burning occurs. Apart from the fact that the boiling points of both water and acetic acid are likely to be substantially affected by concentrations of other soluble matter in the cocoa, it is also apparent that the process of cocoa drying, as we know it, is one of surface evaporation and that there is not much likelihood of the cocoa structure being violently burst open by liquids boiling internally; if this were to happen on a large scale, the result might be embarrassing, as presumably fat also would be released from inside the structure. Though it is common with some roasters to experience a slight wastage of fat, both into the cocoa shell and on to the walls of the machine, it seems that this is due more to the surface impacts to which the beans are subjected than to serious internal ruptures.

This is the first of a series of articles by J. Koch, a well-known writer on chocolate processing.

The above article originally appeared in the British magazine, Confectionery Production. It was reviewed in the Technical Literature Section of The Manufacturing Confectioner, where it received much comment. The numerous requests received for a reprint of the article, led the publisher and author to give their permission for this printing.

Review of Conditions.

There are, nevertheless, quite marked differences between beans which have been dried at relatively low temperatures and others which have been roasted at high temperatures, and it is worth reviewing the conditions which must be fulfilled if either style of treatment is to be successful. Whilst it is occasionally suggested that the roasting process can be either omitted or drastically curtailed, excess moisture and volatile acids being eliminated at a later stage in the processing, it is commonly accepted that from 4 to 6 per cent of moisture should be removed before attempting any of the subsequent grinding and mixing processes of chocolate or cocoa manufacture. As this moisture is invariably removed in the form of vapour, it is essential that adequate heat is applied to evaporate it and adequate ventilation provided to carry it away; in the case of high temperature roasters this is usually simple, but where low temperature drying is concerned, the adequacy of the air supply is usually the limiting factor on performance. It is also evident that the time required for diffusion of moisture from the centre to the surface of the bean will also vary to some extent with the temperature and other conditions, but as the quantitative treatment of diffusion rates of this nature is very involved, it will not be referred to in detail here.

Types of Roasters.

In most modern roasters, the heating of the beans, whatever the original fuel, is effected by a stream of hot air; the only exceptions are the drum roaster, in which the heat transfer is by conduction through the walls of the drum, usually at a high temperature, and the high frequency electrical roaster, in which heat is generated internally in the beans. In these two types, it is only necessary to provide sufficient ventilation to carry away the vapour. Assuming that 5 per cent of moisture is to be evaporated, this requires about 130 lb. of air per 100 lb. of raw beans if the exhaust is to be saturated at 100 deg. F., 68 lb. of air at 120 deg. F., 34 lb. of air at 140 deg. F. or 17 lb. of air at 160 deg. F.; these quantities are relatively moderate and the necessary circulation is usually given by natural draught alone, without the use of fans, and only with the high frequency roaster is this likely to cause occasional difficulty.

In the majority of machines, however, the air must also carry sufficient heat to warm the beans, evaporate the moisture and make good heat losses from the machine itself, and reasonable efficiency is only attained in batch roasters by the use of an initial air temperature hotter than the safe temperature of the beans, which is usually taken to be about 300 deg. F., once dry.

Avoiding Searching.

So long as the beans are evaporating moisture, the bean surface remains at a reasonably low temperature and will tend towards the wet bulb temperature; in common with other drying processes, however, the later stages of the drying occur at a falling rate of evaporation, resulting in a critical end point to the roast as the evaporation rate drops and the surface of the bean starts to rise rapidly in temperature; moreover, some beans are fairly certain to dry out more rapidly than others and become liable to scorching in advance of the remainder.

Roasting machines of this type are fitted with mechanical draught arrangements; if adjusted for fast roasting, say 18-22 minutes per batch, the air usage is of the order of 150-200 lb. of air per 100 lb. of raw beans, and the inlet air temperature will be in the region of 600-900 deg. F. At more moderate rates, say 30 minutes per batch, the air usage may be 250-300 lb. per 100 lb. of raw bean, and the corresponding inlet temperature 450-600 deg. F. In practice, the air rate and air input temperature are not steady throughout the roast, as the fan is usually located on the exhaust side of the machine; this results in a falling air rate and a rising input temperature as the roast proceeds, assuming a constant fuel supply.

Unfortunately, the vast majority of such machines cannot be operated satisfactorily at much higher air rates as the air stream tends to sweep too much material out of the roasting cylinder and the process losses become altogether unacceptable; also, if the roasting time per batch is prolonged sufficiently to allow extra air to pass through the beans, the heat losses from the machine become such a high proportion of the total heat input that the object is again defeated.

Drying at Low Temperatures.

In consequence, genuine low temperature roasting, characterised by an air inlet temperature of the order of 300 deg. F. or less, is virtually impracticable on such machines; turning out the beans at a low surface temperature, whilst still employing high inlet air temperatures, only results in inadequate drying and has been the cause of failure in a great many attempts to produce low temperature roasted beans. To achieve satisfactory drying at very low temperatures, as has been recommended in some quarters, the air usage must be stepped up enormously; if, for instance, an air inlet temperature of 200 deg, F. is specified, the requirement for satisfactory drying may be as much as 700-800 lb. of air per 100 lb. of raw cocoa, even in a well insulated machine; to the best of my knowledge, cocoa has only been effectively dried in this fashion on experimental units, but the results have been most interesting and well worth further study.

Physically, the very complete drying possible without risk of a surface scorch developing results in a very friable bean; both winnowing and the subsequent grinding are conspicuously simple. From the flavour point of view, it is apparent that at least some of the flavour development normally associated with the conche can also be secured in the roaster, as might perhaps have been foreseen by students of Dr. K. Aasted's work, *Studien uber den Conchierungsprozess;* there is also a noticeable effect on the keeping qualities of chocolate made from such beans. Too much exposure to hot air, as might be expected, can also be deleterious and it appears that an advantageous compromise can be struck between the use of high temperatures with little ventilation and low temperatures with excessive ventilation; the best compromise is, of course, likely to be different for different crops of beans, and will in any case be very much bound up with the type of further processing intended. The possible combinations are, however, almost inexhaustible, especially if the heating load can be partially carried by non-evaporative heaters, such as results, for instance, if the beans are preheated by low temperature radiant heaters in an unventilated space, as is done in some grain driers.

Roasted or Dried?

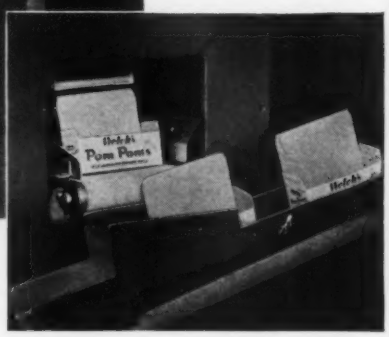
We are, however, still not appreciably nearer a satisfactory distinction between roasting and drying; the Oxford dictionary describes roasting as cooking by exposure to an open fire or the sun, and adds a caution to the effect that if an oven is employed, then the process is more properly referred to as baking. This definition, taken literally, would classify as driers all machines which use hot air as the bean heating medium, irrespective of the temperatures at which they are operated; yet nuts are frequently roasted on this type of machine, and who would be so rash as to try and sell "dried nuts" to the public?

By and large, I think perhaps Dr. Fincke's definition is as acceptable as any, conveying as it does the idea that the beans have been subjected to a dry heat. Let us not forget, though, that the inference is not altogether reliable; beans can still be damp at temperatures much higher than 100 deg. C., and they can also be dry heated to good effect at temperatures much lower; if this were not so, we should look in vain for flavour development in nine out of ten present-day conches.

Reducing CARTON COSTS

FOR MANY MANUFACTURERS

Palmer Carton Former in plant of James O. Welch Co., makers of popular candy bars. View shows blanks entering the machine.



Finished cartons leaving the machine and being conveyed to packing tables.

A Palmer Carton Former cuts costs so drastically that it often pays for itself in a matter of months. That's why so many cost-conscious manufacturers are installing it.

With this machine, you make your own cartons, as required, from inexpensive die-cut blanks. No need to carry a large stock of factory-processed cartons. You not only make a large and immediate saving on material costs, but also on labor which you may now be using to set up knock-down or folding cartons.

Operating at speeds of up to 102 per minute, the Palmer forms and glues the blanks, delivering the finished cartons in upright position, ready to receive the goods which will be packed in them. All the attendant has to do is to keep the machine's magazine supplied with blanks and occasionally check the adhesive reservoir.

Cartons are uniformly neat, square-cornered and firmly glued—handsome in appearance as well as sturdy.

Take the first step now toward *new savings*—write for literature on the Palmer.

PALMER

Continuous Motion
CARTON FORMER

PACKAGE MACHINERY COMPANY • CARTON DIVISION
Springfield, Massachusetts

NEW YORK CHICAGO BOSTON CLEVELAND ATLANTA DALLAS
DENVER LOS ANGELES SAN FRANCISCO SEATTLE TORONTO MEXICO, D.F.

PACKAGE MACHINERY COMPANY

International Cooperation

Solves Gregg Packaging Problems

By CLARA BALDWIN

PACKAGING of the candies distributed by Gregg International, Inc. of New York City is an amazing story in international cooperation, since both the Karl Fazer factory in Finland, for whom Gregg International are distributors, and the New York concern exchange packages, package designs and ideas.

Since the type packages received from the company in Finland, handsome though they are, do not completely fill all the needs of the customers for whom Gregg International is importing confections, the import firm designs its own transparent packaging and window boxes. Round acetate containers are manufactured here for them, and Gregg International imports candies in bulk and packages a portion of them at their own warehouse in New York. The American representatives sent samples of their acetate package to the factory in Finland to show them what was being done. The acetate box received a very warm acceptance in Finland, and today Fazer is packaging candies for their home market as well as for European distribution in completely transparent acetate boxes, bottoms as well as tops, although the bottom of the original package used currently by Gregg International is opaque, being made of cardboard. In other words, Fazer has adapted the package designs as an idea, and purchased a special machine from the States to manufacture those boxes.

Another innovation on that round transparent package designed by Gregg International is an enclosure card which is actually a tiny folded sheet of gold paper, handsomely printed in green. These enclosure cards are designed as companion pieces to the sticker label centering the lid of each of the boxes, and is so placed at the top of the filled package that it forms a part of the design by showing through the lid around the label. Thus the enclosure card becomes a part of the package design.

Incidentally on enclosure cards, inserts, labels, or such, to be used on candy packages for shipment to Gregg International by the factory in Finland, copy and design are worked up in the New York offices, then mailed to Finland to be printed and applied. That way, wording and design will be most appropriate for the American market.

A similar situation to the acceptance of the round acetate package by the Fazer company has been worked out on window boxes and on cello-bags. The cellophanes available to Finland are of the French type, which means they are too brittle, by and large, for the American market. Hence Finland is adapting certain of the Gregg International ideas on window boxes and on cellophane packaging for her European trade and home consumption where the more brittle type of cellophane stands up satisfactorily. Climate conditions make the difference.

The newest package for the Gregg International list is a pliofilm bag of assorted wrapped pieces of imported candies. There are fourteen different centers (nut, fruit, cream, fudge, et cetera) to these candies, and each different center has a distinctive, individual wrap, which means a colorful assortment known as "Coronettes". By using a clear, transparent bag for the assortment, Gregg International takes advantage of the gay foreign wrapping. To complete the package design, an insert label is being enclosed in each bag, to center the package, and the

top is tied with gay colored cord. The label is a handsome gold medallion, and the candies in the pack hold the label into position in the small bags which contain 12 ounces of candy each.

More and more, Gregg International is specially packing the candies which are shipped from Finland in bulk. As an overall picture, at the present time the proportions of their sales are about 60 percent in bulk candies, 10 percent being repacked, and 30 percent packaged for them at the factory overseas.

Many of the Gregg International customers are supermarkets, which means the window box, cellophane bag type of package is the most important, since it displays well and shows the product to best advantage for impulse sales.

Just recently a new window box for lentils has been introduced by Gregg International. It is a folding window box with a white background, a small package of six ounces, rectangular so it will stack and display well.

From their experience in working up designs for window boxes, Gregg International designers have learned some important facts. First, they have learned that while it is necessary to design a package with an outstanding appeal—one which will attract customer attention, there is the possibility of making the package even too striking.

One of their small window boxes, known as the Carnival package, is an excellent example. In design, the company received much favorable comment on that box. The colors were clear and brilliant. It had two windows instead of one, with red and blue stripes framing each window. The package stood out, but when the multicolored candies, which were in more delicate tones than the package hues, were placed inside the box, the box definitely overshadowed the product and tended to neutralize the effect. Present designs for Gregg International packages place delicacy of color first, with the emphasis to be on the contents and to make them stand out through the window opening, while the design is created to focus the eye on the contents, thus arousing interest on the part of the customer in the candies themselves, not in the package. It is obviously the contents, not the package, which Gregg International wants to sell and which the customer will ultimately consume.

With the pastel toned lentils, Gregg International has inaugurated a system of packing to order. The candies are brought in from Finland in bulk shipments, then repacked to fill a color or flavor preference for the customer. At the present time, Gregg International is having a considerable demand for the creme de menthe flavored lentils for summer trade. In many packages they are now packing only that one item, in acetate boxes, making an attractive, cool-looking package, in delicate green.

Also, Gregg International encourages their customers to work up their own individual assortments or color combinations. Many of their customers, who operate exclusive type shops, have their own package designs, and by working out a special color arrangement or assortment have added another exclusive feature to their list of merchandise. The candies for such assortments or unusual packages are shipped to the customer in bulk.

Speaking of bulk shipments, Karl Fazer does a magnificent job of packaging their candies for protection on the long oversea's journey. Each shipment arrives in plywood cases, which are completely lined with wax paper bearing the imprint of an overall monogram design with the name Karl Fazer in red on white. These shipping cases are made of birch plywood, which is light in weight but has a high tensile strength. They are immaculately clean, polished, and beautifully finished. Inside each is packed 8 or 12 boxes, also of plywood and each fully lined with the wax paper. Over the top of each case before the lid is fastened down is placed a corrugated padding to hold the contents firm.

For shipping the Crown Marmalaads, the inner packing containers are made cylindrical to fit around the individual boxes, and each holds six boxes. The top box in each container is permanently topped with cellophane for display purposes, while the remaining five have loose cellophane under their lids to protect the candy.

On arrival at Gregg International, the shipping cases are used for storage boxes and all boxes are stored on shelves raised well off the floor.

The absence of ornateness on the oblong box of Finlandia chocolate truffles serves to attract attention to the foil wrapped pieces within.

Grape dragees, clustered in cellophane and topped with an imitation grape leaf, hint at the flavor to be found inside.

These plywood cases are assembled in the Fazer plant, the parts received from the Finnish box manufacturer in knocked down state. Fazer handles all their own box manufacturing, design, et cetera in their own plant. In fact Fazer makes everything they sell. Recently with the opening of a second building across the street from the main factory in Helsinki, Fazer has separated the two phases of their business entirely. The art department, carpentry division maintained for building display booths et cetera, and the box plant were all moved into the new building, leaving the factory exclusively for making candy.

Designs for packages in Finland have an elegance and delicacy about them, which lend a distinctive air to them. One among those packages is the distinguished crown box used for packaging the Crown Marmalaads. Permission was given to Fazer years ago to reproduce the British Royal Crown on that package, so pleased was the British king when the Fazer marmalaads were introduced at the coronation of Edward VII of England.

It is interesting, too, that Fazer's Crown Marmalaads were the only candy used at Princess Elizabeth's wedding reception.

At the inception of the Crown package, Fazer designed special machinery to handle the job of making those particular boxes and the whole box is made by machine, though it is of rounded shape. The crown emblem on the cover is an exact reproduction of the British Royal Crown done in eight colors. The boxes are made in both six and ten ounce sizes, and the label is pasted on the lid top.

During the first five months of this year, Gregg International has sold 543 percent more of the Crown Marmalaads than during the same interval of 1950, though at that time they had felt well pleased with their business on that item!

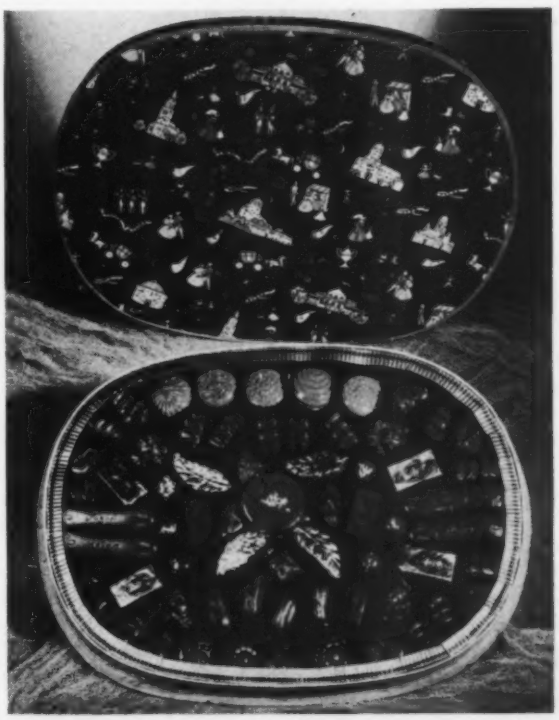
Further cooperation between the two firms is shown in supply. When Fazer wanted to introduce the cellophane packaging to Europe, Gregg International arranged for shipment of packaging machinery to Finland for the purpose. Two special machines, one a transwrap, the other for manufacturing the acetate boxes, have been exported to Finland and the Fazer plant to handle their new types of packaging.

There are yet a number of ideas which Gregg International is introducing into this country which originated with the Fazer plant. One of those is the unique packaging of their grape dragee as a cluster of grapes. The candies, which so much resemble Concord grape berries, are inserted into a cornucopia of cellophane with the top twisted around a large artificial grape leaf, thus forming what appears to be a bunch of grapes.

Fazer packs chocolates in exceedingly handsome gift boxes, but to the present time Gregg International has not brought them into the American market, though they are seriously considering doing so.

In the meantime, both concerns are working together to present the fine candies made by the Karl Fazer company to the American, as well as to the European, markets in the most appealing fashion possible. Both Karl Fazer and Gregg International are constantly on the alert for new ideas, and both are working in the closest cooperation, with an exchange of ideas and designs, for their mutual benefit.

Plywood cases of white birch protect Marmalaads in shipment from Finland; are afterwards used in displays.



Gay Finnish scenes dot the lid of an oval box of assorted Finlandia confections.

—NCA Convention Highlights

(*Continued from page* 19)

V. Zaccardi, traffic manager for Bunte Bros., explained the purposes of the traffic department in assuring the receipt of raw materials by the manufacturer and the shipment of products to the wholesalers. He added that the various traffic departments also saw to the control of transportation costs, the broadening of markets, the advisement of management on shipping safety and the obtaining of rate adjustments through cooperation with other traffic departments.

Paul Snyder of the Cracker Jack Co. reported on new features in transloading privileges on western railroads for pool car shipments, which enable all consignees to receive their shipments at about the same time.

The problems and advantages of establishing temporary warehouses in certain areas were told by R. J. Goble, of Rockwood & Company. He pointed out that the plan allows quick delivery and rapid turnover of merchandise, but cautioned manufacturers to make a complete survey of such conditions as the sales average and turnover of the area to be serviced, the cost comparison of placing the plan into effect, available storage conditions and prevailing weather conditions in the area.

"The warehouse plan is just a shipping room moved to another location," F. A. Cameron of W. F. Schrafft & Sons, Corp., told the conference. He stressed that the operators of the public warehouse should be given a list of operating procedures to follow, telling them under what conditions they can ship and what not.

Current legal action and appeals being made by the conference attorneys in Washington were reported by Wm. Ott of the Kraft Foods Co.; A. E. Hueneryager of Zion Industries, Inc.; and P. W. Kroeker of the Curtis Candy Co.

The various figures compiled by the Department of Commerce on confectionery sales were revealed by George F. Dudik, of the Department's Food Division. Dudik reported that candy production in 1950 may have surpassed national production for every year except 1944. He said an analysis of 192 manufacturer-wholesalers reporting for the two years, 1949 and 1950, indicate a rise of approximately 5 per cent in poundage in 1950. He added that the greatest percentage gains scored were in package goods made to retail at 50 to 99 cents per pound. Dudik concluded that gains for the industry would seem to have been scored chiefly in package and bulk goods sales. The gains in the higher-priced package lines and in lowest priced bulk sales were both ahead, but with some decrease in average value.

"The Office of Price Stabilization stands willing at all times to work with you and all manufacturers," Oliver W. Woods, chief, Grocery Products Branch, OPS, told the convention. "Your problems are our problems. If you feel that different regulations are needed, specific facts and figures should be presented which indicate the need for price action." He asserted that the industry's basic problem under wage stabilization is "Which will offend Junior more . . . having his candy bar reduced in size, or having to squeeze the extra pennies out of dad?"

"The foreseeable future is not one in which manufacturers of candy can take supplies for granted," warned Lawrence Myers, director, Sugar Branch, Production and Marketing Administration, Department of Agriculture. Speaking on "How shortages of materials and supplies will affect candy manufacturers", Myers told the convention that during the past war, candy probably attained its greatest acceptance in history as food, and indicated that candy will play a major part in future mobilization. Speaking specifically on the supply problem, he warned the manufacturers that "it will be necessary to demonstrate needs before the supplies are made available by the National Production Authority," and added that the material need must be proven to be "functional". He reported that the use of aluminum foil is presently limited to 50 per cent of a base usage period; paper supplies appear to be fair, though not abundant, while cellophane supplies are also fair. "The situation with respect to cans is very difficult," he stated. Myers lauded the industry for its "readiness to try out new formulae and ingredients, and to push the products for which adequate raw materials are available" as a great help in easing material shortages.

Major Gen. Herman Feldman, Quartermaster General of the Army, told the final session that his department had found that "candy is not only a quick-energy food, but is also a morale builder." Commenting upon the army's food program, the general stated, "The U. S. serviceman is the best fed warrior in the world . . . he even has better meals than he had at home." Feldman cited a survey made by the Quartermaster Corps showing food preferences, which revealed that four of the most preferred items in the army rations were confections. Commenting on the industry's cooperation with the Quartermaster corps, he stated, "Your aid in developing specifications for the confections in the operational rations has resulted in mutual benefit." He lauded the industry for dedicating the convention to the national mobilization theme, stating, "it indicates that your great industry stands ready to do its full part in the emergency which confronts our country."

An overflow crowd of exhibitors filled the Stevens Hotel exhibition hall for the NCA's 25th Confectionery Industries Exposition during the three days of the convention. Booth space within the hall was filled and several exhibitors were placed in the hall lobby.

Equipment exhibitors were the main center of attraction on the floor. Several featured their larger pieces of equipment. A complete mogul was set up in one end of the hall while at the other a foreign firm had brought in their huge five roller chocolate refiner and a large rotary conche. Other equipment shown included sucker machines, cooking and cooling units, depositors, coaters, batch mixers and formers, starch tray stackers, mixing pans and plastic machines.

A number of wrapping and packaging machine exhibitors were present with both volumetric and scale filling machines, bag sealers, sucker wrapping machines, label sealers, carton formers, and foil wrapping machines. Several cellophane, foil and paper products manufacturers were also present.

Among the ingredients manufacturers exhibiting were producers of chocolate, coconut, Soy products, pecans and almonds, dipping fruits, flavor extracts and oils, corn syrup and starch, yeasts and colorings.

DEPEND ON ATLAS CERTIFIED COLORS

Industry's Standard for 100 Years

STRENGTH, UNIFORMITY AND BRILLIANCE combined with MAXIMUM SOLUBILITY are the qualities which make Atlas Colors industry's first choice.

For samples, information or special counsel, write us direct.

FIRST PRODUCERS OF CERTIFIED COLORS

H KOHNSTAMM & COMPANY Inc.

ESTABLISHED 1851

89 PARK PLACE, NEW YORK 7 · 11-13 E. ILLINOIS ST., CHICAGO 11 · 4735 DISTRICT BLVD., LOS ANGELES 11

ATLANTA · BALTIMORE · BOSTON · CINCINNATI · CLEVELAND · DALLAS · DETROIT · HOUSTON · INDIANAPOLIS · KANSAS CITY, MO. · MINNEAPOLIS · NEW ORLEANS · OMAHA · PHILADELPHIA · PITTSBURGH · ST. LOUIS · SAN FRANCISCO

WILD CHERRY IMITATION

1535

Put this LEADER among flavors to work *selling your line.*

Tangy and refreshing . . . 1535 Wild Cherry never fails to win instant and lasting friends the first time tasted . . . almost belies the word imitation.

H. Kohnstamm's famous flavor chemists have given to 1535 Wild Cherry not only a truly distinctive delightful taste but also *real heat resistance* to hold that flavor under high cooking temperatures.

Get acquainted with 1535 Wild Cherry or other Atlas heat-resistant imitation flavors (1500 Line): Raspberry, Grape, Pineapple, Strawberry, Orange, Banana, Apple, Pear, Lemon, Lime, Peach, Rum, Rum and Butter. *Write, wire or phone a trial order today . . .*

H. KOHNSTAMM & CO. INC. TRADE MARK HK ESTABLISHED 1851 STRENGTH · UNIFORMITY · PURITY

One Hundredth Anniversary

FIRST PRODUCERS OF CERTIFIED COLORS

KOHNSTAMM & COMPANY Inc.

ESTABLISHED 1851

89 PARK PLACE, NEW YORK 7 · 11-13 E. ILLINOIS ST., CHICAGO 11 · 4735 DISTRICT BLVD., LOS ANGELES 11

ATLANTA · BALTIMORE · BOSTON · CINCINNATI · CLEVELAND · DALLAS · DETROIT · HOUSTON · INDIANAPOLIS · KANSAS CITY, MO. · MINNEAPOLIS · NEW ORLEANS · OMAHA · PHILADELPHIA · PITTSBURGH · ST. LOUIS · SAN FRANCISCO

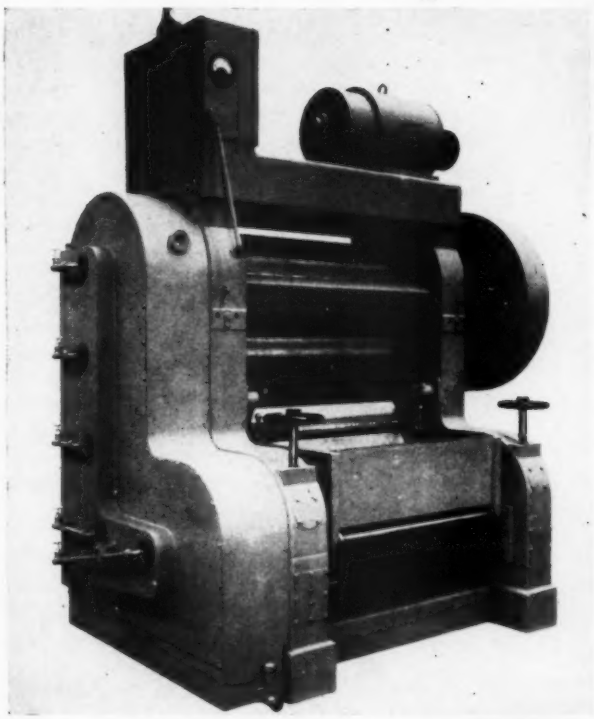
Candy Equipment PREVIEW

THIS SECTION APPEARS QUARTERLY IN THE MANUFACTURING CONFECTIONER

SMOOTHER, FASTER, ECONOMICAL PRODUCTION WITH THIS NEW

BUHLER HIGH SPEED MILL

Latest Engineering Development in a Superior 5-Roll Refiner



- High working pressures
- Greater production capacity
- Fine grinding
- Exclusive roll design for uniform cooling, high speeds, high wear-resistance
- Heavy-duty roller bearings
- Gears in oil-tight casing
- Parts operating in lubricating media sealed off to insure product purity
- Special safety device to eliminate breakage risks

If you are planning now for future installations, a telephone call or a note will bring full details and delivery information.

BUHLER BROTHERS, INC.

2121 STATE HIGHWAY #4
FORT LEE, NEW JERSEY

BUHLER B

ENGINEERS FOR INDUSTRY SINCE 1860

Scale . . . Rust . . . Corrosion

IS YOUR PLANT BOILER SAFE?

By B. B. STANDER, Research Chemist

E. W. Smith Chemical Co., Los Angeles, Calif.

One needs only to go back to his youth to remember the "hard stuff" found in the bottom of Mother's teakettle in order to understand the true meaning of "scale". It serves to prove conclusively that when water is converted into steam, a residue of "hard stuff" or scale is found which continues to accumulate as additional water is added. Exactly the same thing happens in a boiler or steam generator.

If scale is permitted to accumulate, the flow of water and steam may be highly restricted or completely stopped. Moreover, fuel costs will increase rapidly. In such cases, the entire unit should be shut down and descaled in order to dispose of the scale. Of course, this means that the boiler and most, if not all, of the plant will be down until the descaling job has been completed.

What actual costs are involved in such a condition depends upon several things:

What kind of scale is present? If the scale can be dissolved or decomposed, such as carbonates, the time for such reaction may not be more than a few hours. However, if it is sulfate scale, silica scale, or several such combinations, 24 or 48 hours may be necessary to complete the job. In some cases, the sulfate scale is so extreme that it cannot be descaled, that is, the scale will not dissolve in an acid scale cutter. In some cases, it becomes necessary to replace the entire coil or tubes. Thus, costs for such replacements and repairs run high.

How long must the plant remain idle? As pointed out, the time necessary to completely descale the boiler and replace any parts indicates the time lost. Inasmuch as the boiler plays such an important part in the plant operation, the rest of the plant is usually down, too. This applies to dairies, creameries, bottlers, confectioners and all types of cannery and food processing plants. Thus, it is evident that the time loss alone may mean several hundred dollars.

Is there any possibility of danger? Definitely, yes. It is very difficult to determine the condition of the inside of a boiler merely by looking at the outside. Oftentimes the formation of scale is not known until the flow of water and steam is completely restricted. Under certain conditions, the intense heat may cause a rupture in a coil or section which could cause a serious explosion, resulting in completely damaged equipment throughout the entire plant, not mentioning the possible loss of life to employees.

Most operators, therefore, believe it is much more economical, and certainly less dangerous, to use a chemical treatment for preventing scale formation, than to wait until scale is formed and then trying to descale the equipment. Descaling should be considered an emergency operation only.

Oxidation

You undoubtedly have seen empty cans lying in the street or in the neighbor's yard that have become rusty, or you have noticed that on steel bridges, the metal has turned brown and rusty. Even in manufacturing plants, such as ice plants, dairies, etc., where there is considerable moisture, most of the bare metal is rusty. This is known chemically as oxidation.

What does this have to do with boilers? It is well known that water contains oxygen, both in its chemical combination and free, that is, dissolved. When metals come in contact with water containing free oxygen, a combination of the metal and oxygen is formed. On some metals, this action may be very slow, on others quite fast. Whatever the case, the combination, as mentioned, is formed converting the metal into a new chemical compound—the oxide of that metal. To further explain, if the metal is copper, the result of combining with oxygen is copper oxide; with iron, iron oxide; etc.

This reaction can take place within your boiler or steam generator unless properly controlled. Under high temperatures and pressure, the action is increased. Thus, it is understood that the inside of the coil or tube begins to decompose, or oxidize. If this action continues, less

of the original metal remains. Thus, the tube becomes so thin that it can hold the pressure no longer. The result is leaks or possible damage to the entire coil.

Corrosion

Oftentimes working hand in hand with oxidation is corrosion, which is defined as "the destruction, decomposition or rusting of metal due to the presence of an acid or acid-like conditions."

In a sense, it is like oxidation, in which the metal has been converted into a metallic oxide when the metal and oxygen are present. It differs, however, in that if an acid condition exists in the water, or if acid forming gases exist, "corrosion or rusting" takes place.

It has been found that various water conditions exist in many parts of the country that can cause serious corrosion. As a matter of fact, these conditions are much more dangerous and hazardous than oxidation, because their action usually works with much greater speed.

Caustic Embrittlement

This condition is the result of excess caustic conditions in the boiler water. The water itself is not the cause. It is usually the result of improper boiler water treatment or incorrect dosage. A physical change takes place in the metal during the high caustic condition which causes cracking of the seams at the tube ends or along the rivets.

Oils—Foaming

Various types of oils, organic and lubricating, are found in boiler water. Under high temperatures and pressures, these oils decompose and form acids, thus causing corrosion. Certain other oils cause foaming, which is the result of emulsification.

Priming

Priming is a condition in which large amounts of water are from time to time carried out of the boiler with the steam. It may be caused by foaming, high water level, high stream or water velocity, splash or high turbulence near a steam outlet. It is considered, therefore, chiefly a mechanical problem which can be controlled by the operator.

Protective Measures

The purpose of pointing out the problems that can and do exist in many boiler plants, is to bring to your attention how serious they can be and what steps should be taken to prevent the destruction of the boiler or boiler parts, thus protecting the plant against excessive costs and inefficiencies.

Protective measures for efficient and economical operations are relatively simple and inexpensive. May we suggest, therefore, that you pay particular attention to the following:

Scale can be prevented in any type of steam converting equipment if the proper type of chemical treatment is used. The type of treatment to recommend for this purpose depends entirely upon the chemical composition of the water to be used. Due to the wide variations of water throughout the United States, it becomes necessary to make a careful analysis of the water condition before recommending the type of boiler water treatment best suited for proper control of scale.

Oxidation and Corrosion can also be prevented when a thorough knowledge of the water is known. Careful examination can reveal conditions that must be considered before the correct type of treatment can be recommended.

Oils—Foaming and Priming—Embrittlement—Yes, all of these problems can be controlled if the correct treatment is used and a reasonable amount of care is exercised in operation.

There are available water analyses from the water departments of thousands of cities, municipalities and private water supplies all over the United States, Canada and many foreign countries. These reports present a most interesting picture in the wide variation of water composition. It becomes possible therefore to calculate and recommend a treatment designed for specific conditions, not only for the prevention of scale, but that of all other conditions contributing to the hazards and dangers we have discussed.

Let us assume, then, that a sample of water to be used in your boiler has been analyzed. Also, you have given the horse power of your boiler and the approximate percentage of return condensate. From this information, not only the proper type of treatment can be recommended, but the amount can be recommended also.

One important factor to consider is the method of application of the treatment. Most chemical and industrial engineers recommend external treating, that is, treating the water correctly in the feed tank or hot well so that by the time it reached the boiler, it is processed correctly for maximum performance. In order to be assured that every drop of incoming water, that is, make-up water, is treated, it is best to use some form of proportioning pump or drip tank. By properly controlling and regulating the flow, each gallon of raw water will receive the amount of treatment recommended for proper control. Due to the chemical action that takes place during this operation, certain amounts of precipitate or sludge will be found in the bottom of the feed tank or hot well. Means should be provided so this sludge can be disposed of every 7 days or so, so as to prevent its flowing into the feed line and subsequently, to the boiler.

Blowing down, of course, is a necessary part of efficient operation. During the regular process of water supply to the boiler, certain chemical changes take place due to abrupt change in temperature. Moreover, as steam is being converted, the residual water becomes more concentrated. Thus alkalinities are raised. Depending upon the general water condition, blow downs should be made approximately every two or three hours.

Care of Boilers

Too much emphasis cannot be placed on the importance of the care of your boiler. Like your automobile, it must receive uniform and regular attention. Longer life and low maintenance costs will be effected if you adhere to these simple, yet highly important suggestions.

First, give your boiler regular attention. Adhere to the instructions made by the manufacturer. Blow down uniformly and regularly. Replace worn or broken parts at once. Oil and grease moving parts in feed pumps. Check spark plugs, burner tips and nozzles regularly.

Second, know the water you are using. Contact some concern who knows something about your water problem. Have an analysis made at once and a recommendation made for a type of boiler water treatment designed especially for your condition. Be sure the boiler water treat-

ment is applied properly and in the correct dosage. Blow down as directed—check the feed tank or hot well, removing all sludge so that the feed water will be free from all injurious condition.

Third, practice cleanliness around the plant, particularly the boiler. Keep other equipment clear so that the boiler is easily reached at all times. Check all valves periodically to be sure the stems are not frozen. Clean gauges and gauge glasses when needed.

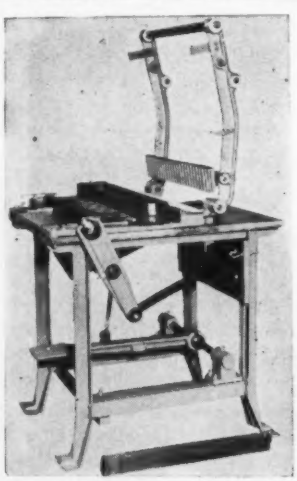
You have a heavy investment in your plant, every part of which deserves utmost care in order to extend its life. The heart of this entire plant is your boiler. Many engineers and operators have experienced difficulty at times in their boiler operation. In most cases the manufacturer is blamed for these unfortunate experiences. In our opinion, virtually every manufacturer has produced equipment to meet the best standards of engineering and each organization is attempting to provide the type and size properly adapted to a specific job. Too, their engineering staffs are incorporating into their equipment the very latest developments in engineering to effect greater efficiency and economy in operation.

The lack of good performance oftentimes is due to improper boiler water treatment. Unfortunately, there are some chemical companies and salesmen who do not hesitate to recommend almost anything to a boiler operator, calling it a "boiler water treatment". It is easily understood, therefore, why many operators will blame the manufacturer of the equipment for failures, rather than the manufacturer of the boiler water treatment which may have been the cause of the trouble.

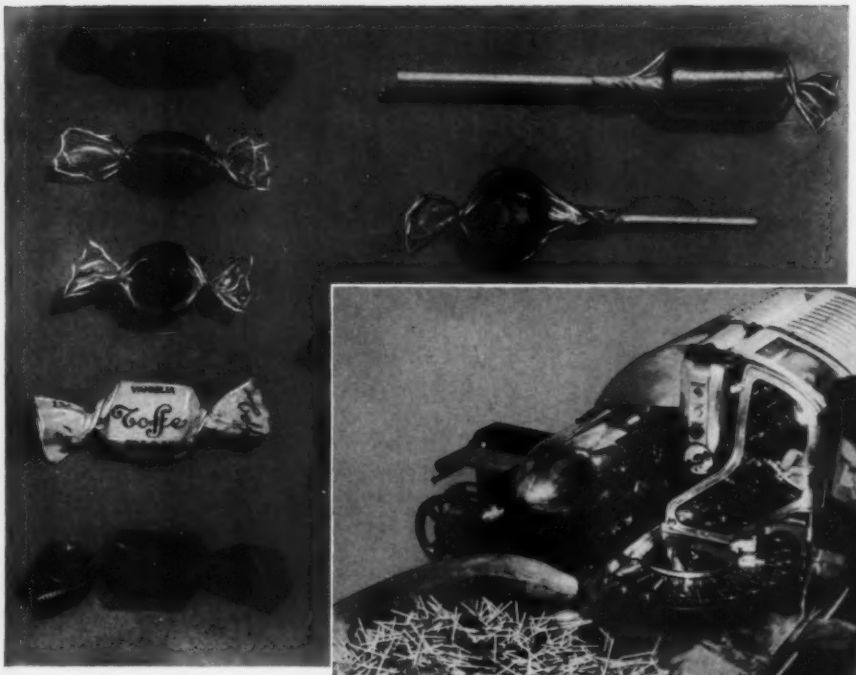
There are many capable and reliable manufacturers of boiler water treatment throughout the country on whom you can rely for suggestions and advice. It would be a distinct advantage to all operators of steam conversion equipment to secure the advice of a legitimate chemical engineer so as to be assured of a treatment designed for his own problem, thus assuring himself of efficient operation for many years.

New Sucker Machine Announced

John Werner & Sons, Inc. has announced the introduction of a new manually operated automatic sucker machine capable of turning out 100 suckers a minute. The machine makes 24 suckers in each single operation and needs only the services of one inexperienced operator.



Only rectangular shapes can be formed on the machine, but the weight of the sucker can be varied by changing the sizes of the strip of candy spun into the machine.



One of a battery of three AMF Rose I.S.T. Twist Wrap Combination Machines wrapping lollipops at Samuel Eppy & Co., Inc., Jamaica, N.Y.

Wrap Both

CANDY PIECES AND POPS *on one machine*

STEP UP YOUR SALES with attractive fan tails on your irregular shaped candy pieces AND lollipops. The AMF Rose I.S.T. Twist Wrap Combination Machine wraps BOTH. It twist wraps up to 160 irregular shaped pieces per minute with eye-catching fan tails at both ends... or up to 110 pops per minute with fan tail tops and heat sealing along the stick.

INDIVIDUALLY WRAPPED CANDIES will increase impulse buying. Colorful wraps seal out dirt and moisture and protect against handling, yet produce attractive, appetizing displays with brand identification on each piece.

WRITE Mr. B. L. Ahrens for complete specifications, price and delivery on the Rose I.S.T. Twist Wrap Combination Machine and Horizontal Automatic Batch Roller and other Rose Candy Machines.

AMF DOES IT BETTER—*AUTOMATICALLY!* SINCE 1900

AMERICAN MACHINE & FOUNDRY COMPANY, 485 Fifth Ave., New York 17, N. Y.
West Coast Sales & Service Headquarters, 1258 Mission Street, San Francisco 3, California

What's New in Candy Equipment

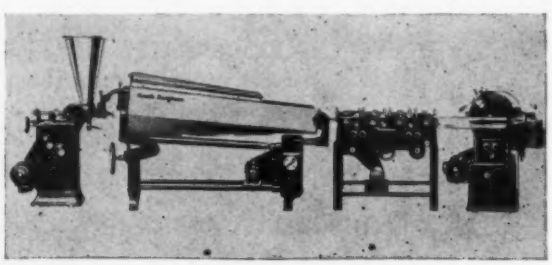
The products described help keep you up-to-date on new confectionery equipment, materials of all types. The items below are coded for your convenience. For any further information, write to THE MANUFACTURING CONFECTIONER, *9 S. Clinton St., Chicago 6, Illinois. Use the coupon on page* 39.

Electric Steam Boilers

Two new electric steam boilers are available for 220, 440 or 550 volts single phase power, these boilers are compact, 14-inches wide, 22-inches long, 28-inches high and require 15 kw power input for maximum steam output. On 220-volts single phase, 68 amps are required to deliver 45-pounds of steam per hour or a heat output of 50,000 Btu per hour. They have no coils to burn out, no tubes to scale, no open flame or fire hazard and no low water danger. Heat is generated by the resistance of the boiler water to the flow of current between solid metal electrodes—if there is no water in the boiler, no current flows and the power input stops. The first model designed for low pressure applications under 15 psi, and is generally exempt from code requirements. The second is an ASME Code Boiler carrying National Board Stamping and Insurance Company Certificate for pressures up to 50 psi. Both of these boilers are Underwriters' Laboratories listed. Pressures are instantly adjustable within the capacity range of the boiler providing precise nonfluctuating temperature control. There are no pressure switches, thermostats or relays. Balanced control automatically and continuously adjusts current consumption to the exact amount required to maintain the desired steam output, pressures and temperatures. *Code M7A51.*

Production Line for Filled Plastic Candies

The machines in the line-up consist of the Center Filler, the Batch Former, the 4-Step Sizer and the Super Rosto-



plast candy forming machine. These machines have a production speed of from 500 to 1,000 pounds of candy per hour. *Code M7B51.*

Pump Operated Load Lift

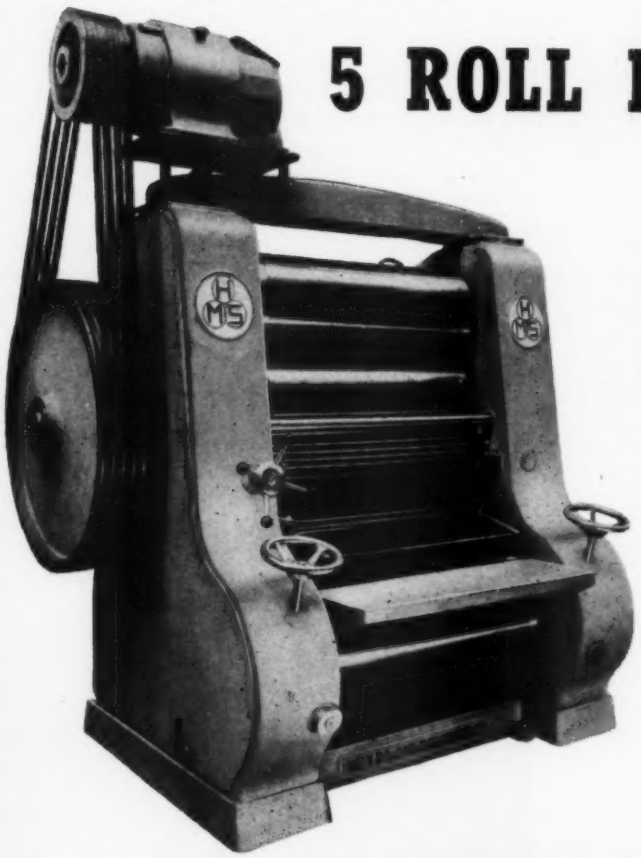
Designed and engineered especially to cut working time, the aluminum single-unit oil tank and pump combination enables this new load-lift to raise loads 25% easier and 25% faster.

The hydraulic fluid is contained in the unit above the dual pumps. This allows the fluid to circulate by gravity,

SPECIAL EQUIPMENT FOR CHOCOLATE

CONCHES
AUTOMATIC MOLDING
MELANGERS
MIXING & TEMPERING MACHINES
DEPOSITORS

Write For Catalog



5 ROLL REFINER

Refines to the Greatest Fineness Ever Obtained

for a Smoother Chocolate

- Utmost Uniformity
- Perfect Control
- Maximum Uninterrupted Output
- Greatest Ease of Operation

Service

—By Bramley Machinery Corp., manufacturers of industrial and processing equipment including THE WELL-KNOWN BRAMLEY MILL.

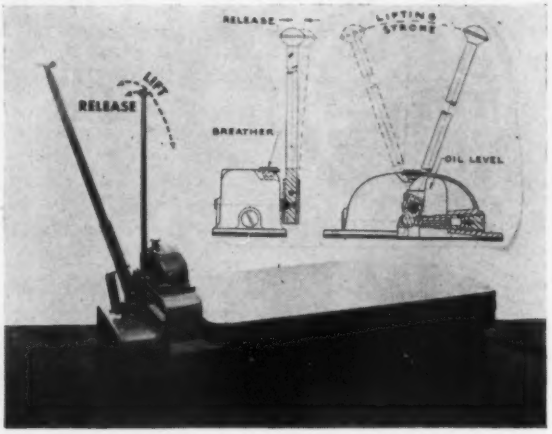
Exclusive Representatives in the United States and Canada

RESEARCH MECHANICAL ENGINEERS DEVELOPMENT

Bramley Machinery Corporation

880 River Road Edgewater, N. J.

rather than being sucked up into the pump from a separate tank underneath.



Radical also is the new design by which the truck is lowered by a simple right-angle flick of the handle. This innovation completely eliminates stooping or bending to lower the loads. The truck raises and lowers with the same lifting handle while the operator stands. He does not need to bend at any time. This new one-unit pump also eliminates the need for gaskets, dust boot and needle-type valve. It fits interchangeably into all standard load-lifts and may be purchased as a separate unit.

The load-lift is equipped with self-sealed ball-bearings, greased for life, and set in steel, cushion rubber, or plastic wheels to assure easier, faster rolling over uneven floors and obstructions. A double ball-bearing fifth wheel allows the load-lift to steer easily with any handle position, and to get into narrow aisles. The lifting and lowering mechanism is completely separate from the pulling handle. Modern arc-welded frame construction with smooth, rounded corner and edges gives streamlined simplicity and safety. *Code M7C51.*

Conveyor for Light-duty Use

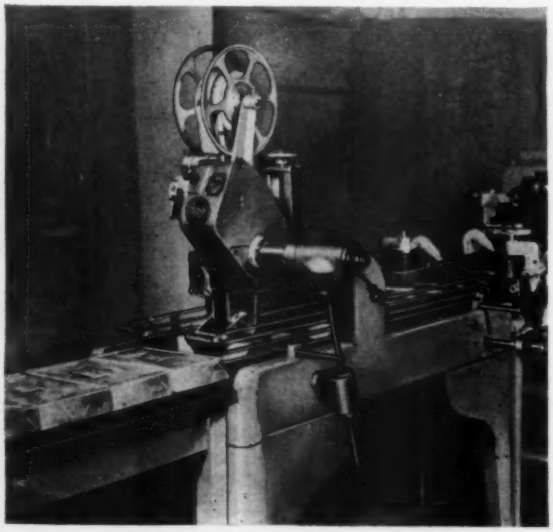
A conveyor especially adapted to packaging operations or where small light materials are to be conveyed. The conveyor can be placed, for example, at the dispensing end of a packaging machine, transporting the packages to the place where the boxing operation is performed.

The conveyor belt is of woven fabric which is easy to maintain. The lugs are of washable canvas. A ¼ h.p. motor is the driving means. The framework is of light structural steel. Flexible design permits variations in

lengths and other respects as required by the products to be conveyed. The speed of the conveyor can be adjusted by changing sprockets on motor. If desired, variable speed drive can be incorporated. *Code M7D51.*

New Top Labeler with Imprinter

Consisting of a conveyor, top labeler and imprinter, the new top labeler automatically imprints and applies thermoplastic roll stock labels to the tops of packages, either on or off center. It can be operated either under its own power or it can be connected to the delivery end



of any wrapping machine or conveyor.

With a speed far in excess of that of any wrapping equipment on the market today, the top labeler can be used for a wide variety of goods. Easily adjustable, it will handle packages as small as $4'' \times 1'' \times \frac{1}{2}''$ to as large as $18'' \times 6'' \times 10''$. A "No package—No label" feature assures against label waste.

Using an easily changed, self-adhesive-backed rubber plate, the simple Imprinter mechanism imprints sales messages, product names, code-dates, quantities, weights, ingredients, prices, etc. It eliminates the need for maintaining costly inventories of different types of labels, since a single stock label can be imprinted differently for various products. *Code M7F51.*

A New Refrigerant Drier

"Drifreez" is the name of a new refrigerant drier. This product does not just hold moisture, it removes the moisture from the system by chemical reaction. Its use is limited to Freons and Methyl Chloride. The active materials in the cartridge are metallic acetylenogens, which are inert to Freons, Methyl Chloride, oils and metals. When moisture comes in contact with these crystals, it is removed by a simple chemical reaction. The products are acetylene, which completely dissolves in the refrigerant and flows along with it, and metallic hydroxides, which remain in a complete filtration unit in the drier, and also effectively neutralize all acids within the system, thereby preventing corrosive actions.

These cartridges come in all sizes up to a one inch liquid line valve. Their capacity is 1½ ounces of water, at which time they become inactive, and must be changed.

The safety of this product is attested to by the Foster D. Snell organization which experimented with acetylene in conjunction with the Freons and Methyl Chloride. Under any conditions possible within the system, the acetylene is perfectly safe, and, in fact, acts as part of the refrigerant in these conditions. *Code M4K51.*

Circle Coded Items in Which You Are Interested in Getting Literature

M7A51	M7B51	M7C51
M7D51	M7F51	M4K51

Name.....

Company.....

Position.....

Address.....

City.....

State..... Zone.....

PATENT GRANTS

Of Interest to Confectionery Manufacturers

Packaging machine having article receiving and transferring sections for handling articles in group formation 2,544,125. Joseph C. Bain and Frank R. East, Toronto, Ontario, Canada.

Application December 26, 1944, Serial No. 569,872
5 Claims. (Cl. 214—1)

A packaging machine comprising a receiving bed having a receiving section and a transferring section, means for feeding a series of small articles into the receiving section of said bed in predetermined grouped arrangement, means for moving said articles to the transferring section of said bed in corresponding grouped arrangement, means in connection with said transferring section for urging said group of articles within a predetermined area and including movable side and end walls for said transferring section movable inwardly to reduce the area of said transferring section and a movable cover movable into engagement with the outer portions of said articles to maintain said articles in a common plane, suction means for engaging said grouped articles in the transferring section of the bed, said suction means being movable to transfer said group of articles therefrom, and means for moving said suction means away from said transferring section or bed to release said grouped articles at a predetermined point in said grouped formation.

STICK-CANDY MACHINE 2,544,502

Gregory Harding Keller, Helena, Ark., assignor of one-half to Robert E. McCormack, Albany, Ga.

Application May 27, 1949, Serial No. 95,745
11 Claims. (Cl. 107—8)

A machine for feeding and twisting a strip of candy and for severing said strips into predetermined lengths comprising, a series of opposed driven elements having gripping and severing means thereon, means for progressively advancing said gripping and severing means into engagement with said strip of candy to successively grip and shear said strip, and means for rotating said series of elements about the axis of said candy strip while said gripping means are in engagement therewith.

COLLAPSIBLE CARTON 2,544,565

Lawrence H. Phillips, Chattanooga, Tenn., assignor to O. B. Andrews Company, Chattanooga, Tenn., a corporation of Tennessee.

Application October 28, 1949, Serial No. 124,178
3 Claims. (Cl. 229—33)

A paperboard carton including a tray and a cover of substantially the same depth hinged along the rear edges thereof, the tray comprising a bottom panel with a front wall, rear wall and end walls substantially perpendicular thereto extending from the edges thereof, the front end edge of each of the end walls adjacent the front wall being offset inwardly of the plane of said front wall a substantial distance and having a projection extending outwardly of the plane of the front wall, the cover comprising a top panel with front and end walls corresponding to said tray walls adapted to extend about the tray walls when the cover is disposed over the tray, the cover wall corresponding to said front wall of the tray having an opening therein at each end thereof adapted to receive said projection upon disposition of the cover over the tray to prevent separation thereof, the offset relation of said end edge affording positive clearance between the outer corner formed by said tray walls and the inner corner defined by said cover walls, whereby jamming of the cover in closing movement over the tray is prevented and positive locking engagement of the projection in the opening is facilitated.

PEANUT CLEANER 2,548,142
Dannie M. Carter, Blakely, Ga.
Application January 16, 1947, Serial No. 722,313
2 Claims. (Cl. 209—44)

In a cleaner for peanuts and the like embodying a shaking screen assembly and pneumatic means for removing light foreign matter from the peanuts, the combination of means for removing heavy foreign matter comprising a trough at the discharge end of the screen assembly substantially coextensive in length with the width of the screen assembly, a perforated bottom for the trough sloping transversely of the shaking screen forming a low point adjacent the longitudinal mid-point thereof, a divider baffle positioned above the low point of the trough to direct the mixed peanuts and heavy foreign matter toward the ends of the trough, a vertically disposed baffle extending substantially the length of the trough and positioned at the side thereof opposite the screen, an air duct beneath the trough substantially coextensive in length therewith, a blower associated with the air duct to direct a current of air upwardly through the perforated bottom with a velocity sufficient to lift only the peanuts, an air baffle over the trough disposed to direct the air borne peanuts over said vertical baffle, a discharge spout for heavy foreign matter having its upper end located at the low point in the perforated bottom and its lower end passing through said air duct, and a plate spaced above the upper end of the spout and disposed to deflect the peanuts and foreign matter against direct entry into the spout as they are delivered into the trough.

BAG PACKER 2,548,075
Henry L. Stoker, Claremont, Calif.
Application November 9, 1946, Serial No. 709,064
9 Claims. (Cl. 249—60)

A bag packer adapted to be driven by a motor means, which includes: a hopper adapted to receive a finely divided material; a pivoted beam adapted to receive a bag at one end thereof; a conduit attached to said beam for movement therewith and mounted to extend into said bag; reversible

motor means; a reversible screw conveyor driven by said motor, extending from said hopper into said conduit to a point adjacent the open end of the latter to move said material from said hopper through said conduit, said conduit being shaped to permit of its movement with respect to said conveyor without binding against the latter; counterbalancing means attached to the opposite end of said beam; and control means adjacent said opposite end of said beam and operated thereby to reverse the rotation of said conveyor means and remove some of the material in said bag when the combined weight of said bag and said material contained therein exceeds a predetermined amount.

WRAPPING MACHINERY 2,545,273

Joseph Arthur Gilbert, Gainsborough, England, assignor to Rose Brothers (Gainsborough) Limited, Gainsborough, England, a British company.
Application February 7, 1946, Serial No. 646,152
In Great Britain February 27, 1945
2 Claims. (Cl. 93—2)

A wrapping machine comprising a movable pocket member formed with a series of pockets each of which is provided with a wrapping, means for feeding articles to successive pockets of said pocket member for transference to a succession of stations at each of which an operation is performed, a magazine arranged above that pocket of the pocket member which for the time being is at a main ejecting station, an ejecting member arranged below the pocket at the main ejecting station, operating means for causing the ejecting member normally to pass through the base of each pocket in turn as it arrives at the main ejecting station so as to eject the wrapped article into the magazine, a detecting mechanism adapted to detect failure of the article-feeding means to feed an article forward, a stop mechanism arranged upon such detection to prevent actuation of said operating means upon arrival at the main ejecting station of the pocket to which the article-feeding means failed to feed an article.

PROCESS OF PRODUCING MAPLE SYRUP CONCENTRATE 2,549,877

Charles O. Willits, North Hills, and William L. Porter, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of Agriculture
No Drawing. Application February 28, 1950, Serial No. 146,912
5 Claims. (Cl. 99—142)
(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

The process of subjecting maple products to a heat treatment at atmospheric pressure which comprises evaporating maple sirup to form a residual concentrated sirup boiling about 25° to 50° F., above the boiling point of water and thereafter heating the concentrated sirup at boiling temperature, in the range 25° to 50° F. above the normal boiling point of water, for a length of time sufficient to enhance the flavor thereof, while continuously adding water at a rate such as to maintain substantially constant the boiling temperature of the concentrated sirup.

APPARATUS FOR MAKING FROZEN CONFECTIONS 2,549,915

Clifford McCarl, San Diego, Calif.
Application March 2, 1948, Serial No. 12,495
4 Claims. (Cl. 294—87)

In apparatus for making frozen confections on sticks embedded therein and protruding therefrom, the combination of, a tray having perforations in the bottom thereof formed to receive the shanks of confection sticks extending downwardly therefrom, a stationary floor plate and a floor plate slidable in relation thereto removably installed inside said tray and each having perforations there through conforming in size and arrangement to those in the bottom of said tray and permitting alignment therewith to receive spring actuated means for offsetting said sliding plate and releasably clamping the shanks of said sticks in upright position when installed in said perforations.

Research Information Released At National Meeting of Chemists

Research information of interest to candy technologists was released at the recent 119th national meeting of chemists in Boston and Cleveland.

At a symposium on Pesticides, methods were given for the determination of residues of such compounds on food products.

New types of proteins from the casein of milk are available for commercial use. Recent analysis has shown that casein consists of three separate materials.

Synthetic products simulating natural fruits and vegetables have been made from pure cellulose, fruit acids, salts, sugars and pectins.

A continuous, high-vacuum, infra-red dryer enables heat-sensitive foods to be dried with a minimum of flavor change, protein denaturation, nutrient loss, or other adverse effect.

Norman W. Kempf, Walter Baker Chocolate Company, spoke at a Divisional luncheon on "The Relationship between Agriculture and Chemistry in the Chocolate Industry."

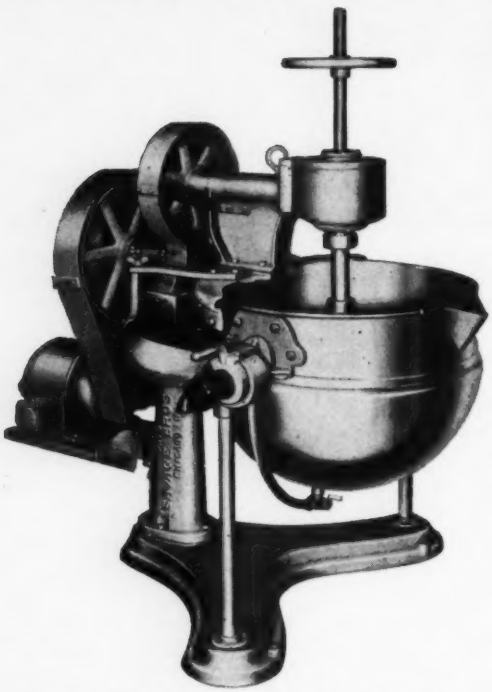
A symposium on Patents included a paper on "Transforming Ideas into Patent Property."

"Active Carbon for the Removal of Chlorine from Water," and "Corrections of Tastes and Odors Resulting from Detergent Tastes", presented means of overcoming objectionable water supplies.

• **Tom Miller,** Package Machinery Company Vice President in Charge of Sales, will leave July 7th on the Queen Elizabeth for an extensive business trip to Great Britain and the continent. The purpose of his trip is to discuss mutual problems and new developments with associated manufacturers and agents and to check on Package Machinery Company equipment now being made in Great Britain and the continent for European and Dominion customers (except Canada). Mr. Miller's itinerary will cover Great Britain, Holland, Belgium, France, Western Germany, the Scandinavian countries, Switzerland, Austria and Italy. He will sail from Italy, September 10th, on the American Export liner Constitution.

Family ties are numerous among Package Machinery workers. 21% of the persons employed are in some way related to each other—a new high record for the industry. Typical are these 14 combinations of individuals chosen on a basis of seniority to represent their respective groups.

UNEQUALLED FOR PERFORMANCE



Direct Motor Drive—Totally Enclosed Bevel Gears—Roller Bearings—Oil Seal

SAVAGE PATENT TILTING MIXER

Model F-6

Years of Experience Has Led to The Production of This Machine

The Savage Patent Tilting Mixer is a marvel of strength, durability and convenience. **Now constructed with bevel gears totally enclosed.** Unequalled in its adaptation to the requirements of the candy maker. Time and labor saving. It is standard of quality and performance for the Candy trade.

The Savage Patent Tilting Mixer

is the very best steam kettle and mixer made for the manufacture of caramel, fudge, nougat and products that will pour. Also recommended for heavy stiff batches such as Jap cocoanut and cocoanut mass.

Made in following sizes:

35 gal. with copper kettle
50 gal. with copper or stainless kettle

Further information and prices on request

Tilted position with improved agitator. Clearance sufficient for thermometer.

Since 1855

SAVAGE BROS. CO.

M. A. Savage, President • Richard J. Savage, Jr., Vice President

2638 GLADYS AVE. **CHICAGO 12, ILL.**

Fine foods deserve fine colors...

National Certified Colors are produced from basic raw materials with precise chemical control at every step in the manufacturing process. For uniform pure-dye strength, solubility and brightness of shade, always specify

National

CERTIFIED

FOOD COLORS

CERTIFIED COLOR DIVISION

NATIONAL ANILINE DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET, NEW YORK 6, N. Y.

BOSTON PHILADELPHIA CHICAGO CHARLOTTE SAN FRANCISCO PORTLAND, ORE. TORONTO

candy making for the beginner:

Lesson VIII (Cont'd)

by ALFRED E. LEIGHTON

Consulting Food Chemist & Candy Technologist

The MANUFACTURING CONFECTIONER *publishes a series of 12 monthly articles on candy making for the beginner. The publisher of the magazine feels these articles will fill a gap existing in the confectionery world caused by the prevalence of departmentalization in manufacturing operations. This has discouraged the all around candy maker to the point where as a craftsman—he is a fast vanishing entity. The series is designed exclusively for the beginner to better his understanding of the function of ingredients and the "why's" of candy making. The course has been prepared by Alfred Leighton, consulting food chemist and candy technologist. He is a well-known figure in the confectionery field.*

PRACTICAL EXERCISE IN NOUGAT MAKING

ASSEMBLE all equipment as in earlier exercises, include three pans and wooden spoon. Have the following new items ready for use when needed; Honey (super market item) about ½ pound; 2 egg whites; edible wafer paper; (supplier item) cream of tartar; glace or candied cherries about ¼ lb.; almonds, blanched and shredded about 10 ozs; pistachio nuts about 2 ozs. Prepare cookie sheets and bars—line with wafer paper—put aside until needed.

Directions—

1. Weigh out 5½ ozs honey into the top of the double boiler.
2. Add 1½ ozs of corn syrup to it in the manner described in earlier lessons.
3. Warm mixture over a gentle flame, or in the bottom part of the double boiler suitably containing hot water —stir honey and corn syrup mixture to blend—warm to 160 degrees F. and set aside until needed.
4. Weigh out 9 ozs of sugar into a second saucepan.
5. Measure 3 fluid ounces of water and add it to the sugar.
6. Warm up and dissolve the sugar—add a few grains of cream of tartar (just about a pinch) and cook to 288 to 290 degrees F.
7. Take a third saucepan and beat the two egg whites to stiffness in it (use egg beater).
8. Pour the sugar cooked item in 6 in a gradual stream on to the stiffly beaten egg whites in 7, beating with a wooden spoon while doing so.
9. Add this sugar-egg-mixture to the honey and corn syrup in item 3.
10. Heat and mix the combination, until it all becomes stiff.
11. Mix and warm 3½ ozs candied cherries, 10 ozs almonds, 2 ozs pistachio nuts in a suitable container until they are warm to the touch.
12. Pour them into the nougat mixture, and continue mixing and stirring until they are uniformly distributed.
13. Now pour the finished nougat on to the wafer-lined cookie sheet, between the bars already arranged. Cover the mass with a layer of wafer paper and place a wooden board on top of the wafer paper. Put a weighty object (a pressing-iron does well for this) on the board to help compress the nougat to shape and size. When cold the nougat can be cut into bars with a sharp knife. Use a saw-like motion to get the proper cutting effect. Wrap the bars in waxed paper.

How To Blanch Almonds

Place the shelled almonds in a saucepan, cover the nuts with cold water. Bring to the boiling point. Remove from the heat. Drain and run cold water over the nuts. Turn them out onto a coarse cloth such as a linen towel, and rub off the outer skin. The blanched nuts can be cut in any manner desired with a proper knife. They may be split in two parts by running a pointed knife blade in at one end.

How To Blanch Pistachios

Follow the directions as given for almonds but boil for about five minutes. Turn the pistachios into cold water. When cold pour them into a suitable strainer (a tea strainer does well for this) drain them, and rub off the skins as under almonds.

Lesson IX

PECTIN JELLIES AND THEIR MANUFACTURE

Of all the attractive eye-catching, and mouth watering confections made by candy craftsmen, pectin jellies hold an esteemed place. They can be an artist's delight with their colors and brilliance, and a consumers pleasure with their delightful eat-more flavors. They have consumer acceptance, and provide quality without excessive price. Pectin jellies can be made in shapes and forms to please consumer whims and fancies; for they can be cast or slab cooled. Pectin jellies lend themselves to volume production without special equipment. As confections go, they have good shelf life properties, for they are inclined to hold their water content. They are a good all-the-year-round item. They can be attractively finished by sanding or crystallising, chocolate coating, garnishing with shredded coconut, or nut powders and pieces. They may be filled with fruit and nut pieces, made in vari-

(*Please turn page*)

colored layers, and present abundant opportunities for the candy craftsman to exhibit his skill and artistry.

The makers of pectin have gone to considerable pains to work out methods and supply standardized products that are capable of producing uniform results time after time, if instructions are followed. Pectin jellies are usually made with sugar, corn syrup, pectin powder, and food-grade acid. The quantity of pectin and the amount of acid used in manufacturing processes are both important. If either one is incorrect, or the method of using it, such as the order or time of its addition to the batch—then unsatisfactory results and spoilt goods will be produced. It therefore behooves the student to take pains in learning the reasons for the procedures recommended, and understand the functions of ingredients.

The Ingredients, Their Characteristics, and Functions

Sugar. As in other confections—the indispensable sweetener.

Corn Syrup. Doctor, grain retarder, modifier of excessive sweetness, bodying agent.

Pectin. Jelling agent obtained from plant sources. Citrus fruits and apples are the most usual sources. Available in grades or strengths described by the makers specifications with certain numbers such as "100" or "150", etc. These numbers refer to the weight of sugar that one pound of pectin will support, or cause to jell, under standardized conditions set up by the makers in their testing procedures. Thus 1 lb. of "150 grade" pectin will jell 150 lbs. of sugar under the standardized conditions. Similarly 1 lb. of 100 grade pectin will do the same thing for 100 lbs. of sugar. In this way the strength of an individual pectin product is denoted by its maker, and the user can thereby be informed of what he can expect relatively from a given pectin. In addition to the grade number the setting speed of pectins is also described as "slow setting" or "rapid setting" as the case may be. These descriptions indicate the relative speed with which the product will jell, when the directions recommended by the maker are followed. It must be borne in mind that pectins from different plant sources do not behave alike, nor yield jellies of identical characteristics. Hence the need for each pectin manufacturer to standardize his product to give uniform results repeatedly, when directions are followed. The type and characteristics of a pectin jelly will depend on the plant origin of the pectin used in its manufacture, assuming other conditions have been standardized. Thus citrus pectins are inclined to yield jellies that are short in texture and not appreciably elastic, whereas apple pectins are inclined to be much more elastic, although they do not require, nor can they tolerate, the amount of acid that is easily borne by jellies made with citrus pectin. Other fruit pectins such as cranberry pectin have their individual characters. In so much as the citrus and apple pectins are the main items used in confectionery, we need not be too concerned with the others. It is enough to know for the purposes of this lesson that they exist, and that they are not interchangeable one with the other.

Low methoxyl, and completely de-methoxylated pectins are newer types of pectin products that have recently been introduced to the market. They have special and somewhat different uses from the regular types. Their use is not widespread at present. They are interesting because they can be used to make novel and unusual kinds of jellies under conditions that are not tolerated by regular pectins. The student need not be too concerned about such special pectin products at present, nor until their use becomes more widespread. When that happens the student will have acquired sufficient knowledge and skill in the making of pectin jellies that he will be able to think up new creations made possible by the employment of such special pectins. They are merely mentioned in this course for the sake of completeness and the provision of information that is entirely up to date.

Acid (Food grade only) One of the indispensable ingredients for jellies made with regular pectins. Without the reaction produced by acid substances, products made with regular pectins would not jell. The commonly and most frequently used acids in the order of their importance are: citric, tartaric, lactic, and occasionally phosphoric. Each one of them will function effectively. Citric acid is used to a greater extent than the others—it is efficient and usually has a price advantage in its favor. Relative cost will govern the use of acid, and availability is another factor. When the fruit acids are not readily obtainable, lactic and phosphoric acids can be used, but in strengths that are modified for they are not interchangeable on a weight for weight basis. Phosphoric acid for example is a strong acid and is used under special circumstances where its strength is necessary and an advantage, where moreover the weaker acids would not function so well.

Buffers are substances with partial alkaline, or antagonistic properties to the acids. In buffer substances some of the acid action has been killed with alkaline (usually soda) materials. The name buffer is descriptive—an absorber of shock. In the case of pectin jellies buffers, when present, absorb the shock of full acid action, slow it down, and permit the nature of the chemical environment to change more slowly than would otherwise be the case. A buffer may be likened to a chemical spring—it absorbs shock, and provides an ultimate state of rest. Buffers are used to slow up the jelling action, and thereby permit an operator to perform his necessary flowing and depositing tasks, while his material is still liquid enough to pour. The following are used in pectin jelly work either by the candy maker, or by the maker of the pectin product (who has added the substance as an ingredient of his pectin mix) to give it the required characteristics: Acetate of Soda, Sodium Citrate, Sodium Potassium Tartrate. In use they are usually dissolved in warm water. Solutions of known or standard strength are conveniently made and free from complications in use if used properly.

How To Make Standard Buffer Solution

Standard buffer solution. Sodium Citrate USP X111 34½ ozs. Put in gallon container, add about two quarts hot water, stir and dissolve completely—fill up to the gallon mark with warm water—when cool adjust level again with water at room temperature, and mix thoroughly. All acid must be completely dissolved before use.

Standard citric acid solution. 8 lbs. citric acid granular USP in one gallon water. Use same method as in making standard buffer solution.

A FEW PECTIN JELLY FORMULAS

Type	Fruit Flavor Cast or Slab	Choc. Flavor Cast or Slab	Strawberry Pulp & Juice Cast or Slab	Tender Choc-Coated Cast or Slab
Sugar	10 lbs 6 ozs	10 lbs	10 lbs	10 lbs
Corn Syr.	10 lbs 6 ozs	10 lbs	10 lbs	10 lbs
Water	1½ gal	5 quarts	5 quarts	5 quarts
Pectin 150 Grade	4½ ozs	4 ozs	4 ozs	4 ozs
Std. Buffer Solution	3½ fl ozs	4¼ fl ozs 15% Phosphoric acid	4 fl ozs	1½ fl ozs
Std. Citric Acid Soln.	3 fl ozs	cocoa 2 lbs natural process	scant 3 fl ozs	1½ plus fl ozs
Flavor & Color	as desired	salt ½ oz vanilla 6 fl ozs	4½ lbs fresh or frozen strawberries extra flavor if needed.	as desired
Cook Degrees F.	229° at sea level	228° at sea level	229° at sea level	230° at sea level

Formulation

An examination of the formulas given shows that they are made up with equal weights of sugar and corn syrup. This 50-50 allocation of sweeteners keeps graining under control, and delays its development during storage. The quantities of 150 grade pectin are virtually the same for each one of the formulas. The pectin forms the network or foundation of standard strength to support the weight of the sweeteners. How well it does this depends on the other factor of acidity. The more acid present the tougher the pectin network becomes up to a point, beyond that point the jelly breaks down. On the other hand a weak jelly will result from insufficient acid. In the formula for a chocolate coated jelly where tenderness is a consideration, the quantity of acid is reduced in keeping with the facts concerning acid functioning. When the chocolate flavored jelly is considered, the phosphoric acid solution used is 15% in strength as against the 50% strength used when citric acid is employed.

Phosphoric acid is a much stronger acid for jelly making than citric, and less phosphoric acid of 15% strength is needed to provide the correct acid background, than if citric acid were to be used. Were citric acid to be used anyhow in this formula, the jelly would be too sour, and the resultant effect entirely unpleasant. Cocoa contains an abundance of natural buffer substances, hence additional standard buffer is unnecessary and it is therefore omitted from the formula. It is this same abundance of natural buffers in cocoa that necessitates the use of the stronger phosphoric acid. Natural process cocoa is specified, for a dutch process cocoa contains the added alkali used in "dutching" hence that would require still more phosphoric acid to provide the necessary acid background—the preponderance of acid would then become undesirable in its over-all effect. The buffers, as already explained, slow up the setting time for jellies, and because of the relative strength of phosphoric acid the balance is restored to practical limits, without the use of excessive quantities.

In the manufacture of jellies made with acid fruits, pulps and juices, allowance for the naturally contained acids in the fruits, etc. must be made in the formula. This is done by reducing the quantity of acid added in such a formula. If this were not done the jelly would not have the setting characteristics and firmness that is called for, as already explained in the text. Fruit and fruit pulps, like all natural products, vary from time to time in their acidic character, and only experience and knowledge of jelly making will enable the candy maker to cope with the requirements of any given batch of fruit, when unusual conditions are encountered. Average formulas and conditions can be set up which will hold true for the run-of-the-mine circumstances that crop up. A good understanding of the facts provided in this lesson will enable the craftsman who learns his trade to make necessary corrections when the desired results are not forthcoming due to the vagaries of natural fruits. Jelly formulation may be regarded as a triangular figure in which sugar, pectin and acid each occupy one of the angles. When any one of the angles is not properly covered by identity or quantity of ingredient—the results are going to be deficient and unsatisfactory.

Methods of Manufacture

In so much as each makers brand of pectin product is apt to be different in certain characteristics, it is obviously a matter of good practice to follow the maker's recommendations on procedure. In this way uniform results will be obtained for the maker has carefully standardized his product and all angles of the triangle of formulation have been covered by him. Careful weighing of pectin, buffers, and acids for the preparation of standard solutions, is a prime necessity for uniformly satisfactory results. It is also of paramount importance to have a reliable thermometer to judge the finishing or cooking temperature. The use of an incorrect thermometer will play havoc with jellies unless the error is known and allowed for in processing. It is customary in formulas therefore, to quote finishing temperatures at so many degrees above the boiling point of water in your kitchen or geographical locality. In as much as altitude depresses the boiling point of water one degree Fahrenheit for every 550 feet of elevation (see lesson 2 under thermometers and boiling points) it becomes important in jelly making to cook at correct temperatures. Thermometers should be checked at least once weekly, in briskly boiling water contained in a clean vessel. Any difference in reading from 212 degrees Fahrenheit (the true boiling point of water at sea level) must be allowed for as a correction. Therefore, taking the boiling point of water at the figure registered on your thermometer, add to that figure the number of degrees above the boiling point of water called for in your formula or instructions. Thus when a cooking temperature of 230 is given, it is 18 degrees above the true 212° boiling point of water at sea level. If your thermometer registers 210 at the boiling point, then 18 added to 210 becomes 228, and that should be the temperature of finishing with your thermometer in your area, when conditions call for a 230 cook. This point has been stressed at length because of its outstanding importance in getting satisfactory results.

When making pectin jellies the following procedures are recommended; 1. The carefully weighed pectin product is mixed with about 6 parts of granulated sugar. This separates the pectin particles, and prevents clumping and

(Please turn page)

difficult solution when the material is added to water. 2. Water is carefully measured or weighed and poured into the kettle—heating is then started. 3. The sugar-pectin mixture is added to the hot water under continuous stirring. The whole mass is then raised to the boiling point and boiling continued for a few moments. 4. The buffer solution is next added together with the corn syrup, and half the quantity of acid that the formula calls for. Temperature is again raised to the boiling point. 5. The balance of the sugar called for in the formula—that is the difference between what has been used to break up the pectin, and the full amount specified formula-wise, is added, and the mixture cooked as rapidly as possible to the specified finishing temperature—the heat is then shut off. 6. The balance of the acid, together with color and flavor are added next—the whole mixed thoroughly, when it is ready for immediate casting or pouring on the cooling slab.

Note 1. The purpose of making the acid addition in two stages, is to have one part of the acid assist in doing some inversion work for grain control effects. This supplements the effect of the corn syrup in the average formula.

Note 2. In some modern candy kitchens the end point in jelly making is determined with an instrument known as a "refractometer" which measures the total solids in the jelly. It is very accurate when properly used.

To be continued • Next installment will complete the lesson on pectin jellies • provide a practical exercise in pectin jelly making, and commence lesson 10 *on so-called gum or starch jelly work.*

Conventions -- Meetings

July 10-12—National Confectionery Salesmen's Association convention, Bedford, Pa.

July 18-21—Southern Wholesale Confectioners Association, Atlanta, Ga.

July 20-21—Kansas City Candy Club Sales Exposition, Kansas City, Mo.

August 4—Badger Candy Club Fall Candy Carnival, Ambassador Hotel, Milwaukee, Wisc.

September 9-12—Boston Candy Show, Hotel Statler, Boston, Mass.

September 17-21—Premium Advertising Assn. of America, Hotel Astor, New York City.

September 23-26—Philadelphia Retail Confectioners' Association, semi-annual candy show, Benjamin Franklin Hotel, Philadelphia.

October 8-10—American Oil Chemists Society, Edgewater Beach Hotel, Chicago, Ill.

October 13-17—Packaging Machinery Manufacturers Institute, Mid Pines Club, Southern Pines, N. C.

October 20—Sweetest Day.

October 22-24—Thirteenth Annual Forum of Packaging Institute, Commodore Hotel, New York City.

November 12-15—National Automatic Merchandising Assn., Public Auditorium, Cleveland, Ohio.

"Bi-Focal Specs"

A talk on the similarity of interests between the Army Quartermaster Corps and the Confectionery Industry.

Presented by

DR. KENNETH T. FARRELL

Chief, General Products Division
Quartermaster Food and Container Institute
At the 68th Annual NCA Convention

YOU ARE all tired of hearing about military specifications. You first heard about them several years ago and you have heard about them ever since. Some of you, no doubt, will be hearing about them again. At any rate, you, who are here this morning, are going to hear about them from me. The word specification was omitted purposely from the title for I, too, am somewhat weary of the expression and hoped, per chance, that "Bifocal Specs" might arouse curiosity.

As a matter of fact, the term may be rather appropriate, for figuratively speaking, with "bifocal specs" the needs of the Armed Forces and the needs of your industry can be seen with greater clarity through one medium. The needs of the Armed Forces are variety, acceptability, and stability, whereas the needs of your industry, as I see them, are intensive research, year round production, and prolonged shelf life. The Armed Forces needs might be said to be in the immediate foreground; your needs are of somewhat longer range.

Bifocal "Specs" is an appropriate term for still another reason. It can be used to indicate that we focus not only on our close-at-hand needs, but also on those in the distance our needs in far off lands if you will—in warm or cold climates. With your permission I would like to elaborate. The Food and Container Institute had an observer over in Korea for three months of this year. He returned recently with a comprehensive on-the-spot evaluation of our operational rations. Bear in mind that none of the procurements made against the new candy specification had reached Korea at the time of the survey. What were the comments? "We want fewer hard candy rolls, we want fewer chocolate bars, the starch jelly discs are good but difficult to eat when cold. We want more varieties, we want fudge, coconut bars, nut rolls, caramel-nougat bars, caramels, chewy chocolate rolls;" In other words, the boys want what they would normally buy at the candy counter in a theater. Today, these boys are in a much larger theater, an open-air theater and they still want the trade name bars they ate back in the old home town.

When I first spoke to your technical research advisory committee about a year ago, some of you may recall my amazement at the lack of candy varieties in the rations. I was astonished at what must have been "satisfied complacency" on the part of industry. I was chagrined with the lack of developmental data. I pleaded for more varieties. I wanted them in the disc form as well as in the bar form. Starch jelly, hard candy, and chocolate bars were being purchased over and over again. This was not good for the boys nor was it good for your industry. Other confections were not included because they were not stable. Why weren't they stable? Because few took the trouble to investigate the possibilities of the newer products on the market such as humectants, emulsifiers, antioxidants, stabilizers and many others—Satisfied complacency! Even the chocolate bars that were being purchased were supposed to withstand 110° F. for 2 hours, but no one paid any attention to *this* requirement. I'm not telling tales out of school. It was claimed by industry that good chocolate could not be made any differently from the way it has been made for the past hundred years. Consequently the specification requirements were lowered to allow the procurement of, what amounted to, commercial chocolate. Satisfied complacency! The specifications served no useful purpose and the chocolate saw no active service. The chocolate industry has quite a notable history and many fine traditions; I admire all the men in it, and I know quite a few personally but I believe in methodical progress, though it be slow; I believe in keeping up with the latest technical advancements; even a turtle as slow as it is has to stick its neck out once in a while, if it wants to get ahead! Within the past few months we have developed a chocolate coating and chocolate bar that will not melt at 120° F. when prepared properly; 19 out of 24, or 80 percent of our consumer taste panel prefer these new products to the ones previously used in our rations. Maybe the experts do not like them as well but our fighting men are not experts *in chocolate*. They are consumers—your present and future customers.

Slight alterations to your so-called secret formulae will not adversely affect the ultimate acceptance of your trade marked products. I would much rather have an improved name-brand product, edible under the adverse conditions of extreme storage and warfare, than a name brand product that is not edible because the processor refuses to adopt new technological developments.

One of the most discouraging things about my position at the Food Container Institute is the necessity of trying to please everybody. My primary interest, and in this I am completely sincere, is to develop for our servicemen the best possible rations. With that as my primary goal I am making every effort to reconcile our goals with yours.

I read recently in the 1951 Collier's Year Book that in 1950 there were over 2000 candy plants in the United States producing about 2 billion 800 million pounds of candy with a wholesale value of 1 billion dollars. Think of it! A billion dollar industry and only 1/1000 of 1 percent was spent by your association on research. You know, the farmers of this great country of ours learned a long time ago that they had to find out how to return to the soil the nutrients they removed if they were to continue to harvest their crops. Research found out how this could best be done. A declining market for confections today should indicate to you the need for some enrichening of your own fields. I don't know what part of your dollar is spent on sales and sales promotion but it would certainly make the research fraction look mighty small. You know, you can fool the public a long

time; you can tie your beautiful packages with fancy ribbons but some day the ribbons may break and the people will see the candy for what it really is. Already a few threads in the ribbon are breaking. It is common knowledge within your industry that the candy has been under constant attack for some time by various nutritionists, dietitians, dental commentators and even Government investigators. Your President is doing a magnificent job in fending off these attacks but he needs your support. Increase your appropriations for research—the dividends will come later. And by the way research is needed along mechanical lines as well as on product development lines.

I seem to have hammered pretty hard on the need for research, but it is difficult to envision far-sighted practical specifications without concurrent development research work. And that research work should be steady, continuous, patient research—not sporadic.

The review article which I previously referred to described the outstanding achievement of the candy industry in 1950; namely, "The transformation of the nickel bar to the dime seller." Who am I to take issue with a national publication—but I will. If our specification meetings accomplished no other purpose last year—they brought the brains of your industry to focus on a common objective all of "the cards were laid on the table," and a new era in candy technology was born. That, in my humble opinion, was the most significant achievement of the candy industry in the 20th century. I hope that spirit continues and doesn't like the old soldier—gradually "fade away."

What about our future requirements? I think the time has come now to review our current knowledge of nutrition for the purpose of raising the nutritional standards of candy. Workers at the Southern Regional Laboratory have been hard at it for years but they have just scratched the surface. An indelible impression must be engraved on your industry. I don't want to imply that candy should be medicinal; it should be candy first—something for the "sweet tooth" a term used affectionately and without fear by our own grandmothers. But after that let's add the extra something to the candy and not to the package.

Mr. Chairman; these new "specs" represent long hours and weary months of exacting labor. I believe those Members of the Association who are chiefly responsible for the study and effort of these "bifocal specs" deserve not only the commendation of their colleagues but the thanks of our servicemen. I believe these "specs" bring us all to 20/20 vision.

It's just as important that we be well guided in our specifications for "victuals" as it is to have good specifications for guided "missiles."

• **The adequacy** of a 1947 order establishing 57½ cents as the minimum hourly wage for workers in New York confectionery establishments will be reviewed by a minimum wage board. The board is to submit a report and recommendations within ninety days. More than half the confectioners in this state already come under the provisions of the Federal Fair Labor Standards Act, which prescribes minimum pay of 75 cents an hour for all workers in interstate commerce.

Cocoa Type Coatings For Army Use

An Abstract of a Paper presented June 19th at the Annual Meeting of the Institute of Food Technology in New York by JUSTIN J. ALIKONIS *and* DR. KENNETH T. FARRELL.

THE extensive use of fats and oils in confectionery products for the armed forces of the United States has naturally caused more attention to be focused on the structure of these fats. The Quartermaster Corps has been interested from the standpoint of shelf life of coated candy bars used in various rations.

This paper on cocoa type coatings is the result of cooperative research of the General Products Division of the Quartermaster Food and Container Institute and the Research Laboratories of the Paul F. Beich Company.

The Armed Forces require cocoa type coatings which will stand up for long periods of time at temperatures up to 120° F. for use in desert and tropic areas. These coatings are not only to withstand these high temperatures, but must be palatable, nutritive, and not stick to the wrappers. Previous use in these cocoa type coatings of fats with softening or melting points in the 120° F. range, which will not melt at body temperature, gave an undesirable shortening taste. The use of low melting point fats which bleed out in hot weather resulted in a gray, unpalatable, sticky coating.

Since the vegetable fats from high lauric sources have the best properties from the standpoint of resisting rancidity, they were tested with various food emulsifiers. To these vegetable fats with different predetermined melting points were incorporated various percentages and combinations of emulsifiers and these were observed at high temperatures and high relative humidities.

It was found that a certain combination of emulsifiers produced an unusual and unexpected result. The vegetable fats with the emulsifiers added had a tendency to upgrade the melting points of these vegetable fats, i.e., these coatings would stand higher temperatures than the predetermined melting points of the vegetable fats used. On the other hand, the coating without the emulsifiers broke down at the temperature of the predetermined melting points of the vegetable fats used. The addition of non-fat milk solids to the cocoa type coatings gave connections which not only withstood higher temperatures, but at the same time eliminated the waxy, shortening taste. Although the melting points of the fats used in the cocoa type coating are higher than body temperatures, the emulsifiers tend to incorporate this fat into a creamy mass which, when eaten with the centers of the various bars, produce a very palatable and nutritive type confection. Another advantage is that these emulsifiers keep the coating from sticking to the wrappers and prevent the greasy feeling that is so often associated with the use of hydrogenated vegetable fats.

Thus the shelf life of Quartermaster Cocoa type coatings has been improved, and these improvements have been incorporated in the new revision of Quartermaster specifications on confectionery products. Two cocoa type coatings are available in the Quartermaster Corps specifications, one with 7.5 percent cocoa, known as light coating, and the other with 17.5 percent cocoa, known as dark coating.

The MANUFACTURING CONFECTIONER'S

Candy Clinic

The Candy Clinic is conducted by one of the most experienced superintendents in the candy industry. Some samples represent a bona-fide purchase in the retail market. Other samples have been submitted by manufacturers desiring this impartial criticism of their candies, thus availing themselves of this valuable service to our subscribers. Any one of these samples may be yours. This series of frank criticisms on well-known branded candies, together with the practical "prescriptions" of our clinical expert, are exclusive features of The MANUFACTURING CONFECTIONER.

Gums, Jellies, Undipped Bars

Code 7D51
Turkish Paste
1 lb.—89c

(Purchased in a grocery store, Chicago, Ill.)

Appearance of package: See remarks.
Box: One layer type, white glazed paper top. Small flowers printed in blue, red and green. Overall design. White paper seal on right side printed in gold.
Appearance of box on opening: Good.
Orange, Lemon, Lime Candy
Colors: Good.
Texture: Good.
Flavors: Good.
Dark Paste: We could not identify the flavor.
Remarks: The best Turkish paste we have examined in some time. Suggest cellulose wrapper as box was dirty.

Code 7E51
Peanut Bar
1⅛ ozs.—3 for 12c

(Purchased in a railroad station, Chicago, Ill.)

Appearance of bar: Good.
Size: Good.
Wrapper: Inside wax paper wrapper. Paper band printed in yellow, blue and red. Imprint of peanut candy in brown and yellow.
Bar:
Color: Good.
Texture: Good.
Taste: Good.
Remarks: A good eating peanut bar. One of the best we have examined this year.

Code 7F51
Brazil Roll
1⅜ ozs.—10c

(Purchased in a department store, Chicago, Ill.)

Appearance of bar: Fair.
Size: Good.
Wrapper: Cellulose printed in blue, red and yellow. See remarks.

Code 7C51
Assorted Fruit Slices
1¼ ozs.—5c

(Purchased in a chain drug store, Boston, Mass.)

Appearance of package: Good.
Bar:
Brazils: Good.
Caramel: Good.
Center Fudge: Good.
Remarks: The best bar of this kind we have examined this year. Suggest an attractive wrapper be used. Printing on wrapper is too small.
Size: Good.
Container: White board boat, printed cellulose wrapper printed in blue and white.
Slices:
Colors: Good.
Texture: Good.
Shape: Good.
Flavors: Good.
Remarks: The best 5c package of fruit slices we have examined this year.

Code 7G51
Brazil Nut Fudge
1¾ ozs.—5c

(Purchased in a cigar store, Boston, Mass.)

Appearance of bar: Good.
Size: Good.

Candy Clinic Schedule For The Year

The monthly schedule of the CANDY CLINIC is listed below. When submitting items, send duplicate samples six weeks previous to the month scheduled.

JANUARY—Holiday Packages; Hard Candies
FEBRUARY—Chewy Candies; Caramels; Brittles
MARCH—One-Pound Boxes Assorted Chocolates up to $1.00.
APRIL—$1.00 and up Chocolates; Solid Chocolate Bars
MAY—Easter Candies and Packages; Moulded Goods
JUNE—Marshmallows; Fudge
JULY—Gums; Jellies; Undipped Bars
AUGUST—Summer Candies and Packages
SEPTEMBER—All Bar Goods; 5c Numbers
OCTOBER—Salted Nuts; 10c-15c-25c Packages
NOVEMBER—Cordial Cherries; Panned Goods; 1c Pieces
DECEMBER—Best Packages and Items of Each Type Considered During Year; Special Packages, New Packages

Wrapper: Cellulose wrapper, paper seal printed in black. Inside bar is a square shape.
Fudge:
Color: Good.
Texture: Good.
Taste: Good.
Remarks: The best nut fudge bar we have examined this year.

Code 7H51
Orange Slices
1 lb.—25c

(Purchased in a drug store, Chicago, Ill.)

Appearance of package: Good.
Container: Cellulose bag printed in blue and white. White paper seal in center printed in blue.
Slices:
Color: Good.
Sanding: Good.
Texture: Hard and tough.
Flavor: Good.
Remarks: Suggest formula be checked as slices are very tough. Suggest bag be printed in orange instead of blue.

Code 7J51
Assorted Gum Drops
14 ozs.—29c

(Purchased in a railroad depot, Chicago, Ill.)

Appearance of package: Fair.
Container: Cellulose bag, paper clip on top printed in red and black. Drops are in the shape of peaks.
Gum drops:
Colors: Good.
Sanding: Good.
Texture: Good.
Flavors: Poor.
Remarks: At this price, we cannot expect too much in the way of quality.

Code 7K51
Jelly Hearts
8 ozs.—10c

(Purchased in a drug store, Chicago, Ill.)

Appearance of package: Good.
Container: Cellulose bag printed in red and white. Red printed paper clip on top.
Hearts:
Color: Good.
Sanding: Good.
Texture: Good.
Flavor: Good.
Remarks: One of the best samples of this type of candy we have examined this year. Cheaply priced at 8 ozs. for 10c.

Code 7A51
Orange Slices
1 lb.—79c

(Purchased in a department store, Chicago, Ill.)

Sold in bulk:
Candy:
Colors: Good.

Sanding: Good.
Texture: Poor.
Flavors: Poor.
Remarks: Suggest orange flavor be checked as it is not up to standard. Also too much acid is used. The licorice slices are good.

Code 7B51

(Purchased in a railroad station, Chicago, Ill.)

Appearance of bar: Good.
Size: Good.
Wrapper: White wax paper, printed in red, blue and yellow.
Bar:
Color: Good.
Texture: Good.
Flavor: Good.
Remarks: The best bar of its kind we have examined this year.

The following items were sent to CANDY CLINIC for analysis and comment and therefore do not come under this month's heading.

Code 7O51X

Pralines

12 ozs.—No price stated

(Sent in for analysis #4725)

Appearance of package: Good.
Note: Pralines are in a round key sealed tin similar to a coffee tin. Mailing carton printed in green and black. Tin colors of yellow, brown, red and blue. Imprint of pecans in brown.
Appearance of tin on opening: Good. Each praline is wrapped in a wax wrapper printed in red.
Pralines:
Color: Good.
Texture: Good.
Taste: Good.
Remarks: A very fine eating praline. Suggest a retail price of $1.25 for the 12 oz. tin.

Code 7M51X

Assorted Chocolate Coated Wafer Thins

12 ozs.—$1.00

(Sent in for analysis #4724)

Appearance of package: Good.
Box: Oblong shape, full telescope. Orchid color glazed paper top printed in dark brown. Name embossed in gold. Cellulose wrapper.
Appearance of box on opening: Good.
Coating: dark.
Color: Good.
Gloss: Good.
Taste: Good.
Centers:
Flavors: Good.
Texture: Dry and hard.
Remarks: Suggest centers be checked as they are not good eating. They are very hard and brittle. Suggest at least one ounce of invertase be used to the hundred pounds; cool cream to about 150 degrees before adding.

Code 7N51X

Cocoanut Bars

1½ ozs.—5c

(Sent in for analysis #4726)

Appearance of bars: Good.
Size: Good.
Wrapper: Cellulose wrappers, gold paper strip inside. Name printed in blue.
Cocoanut bars: Pink and white—coated with an iced coating.
Coating: Good.
Center:
Color: Good.
Texture: Good.
Flavors: Good.
Remarks: One of the best cocoanut bars of this kind we have examined this year.

Confectioners' Briefs

• **Bowman Gum, Inc.,** has elected William S. Savage to the position of President of the Company, Joseph J. Donahue to Treasurer, and Harry W. Shapiro to Chairman of the Board of Directors.

Now only 37 years old, Mr. Savage brings to his new position as President of Bowman Gum, Inc., a total of 18 years' experience with the company.

• **Mars Incorporated** has held lost-time accidents down to a point 75 per cent below the average for the industry, it has been reported. Through fine teamwork on the part of workers, management, and insurance loss prevention engineers, everyone has benefited.

• **Morton M. Schilt,** owner of Kay's Candy Co., Portland, Ore., has announced the purchase of the Van Art Candy Co., a 30 year old Portland firm. Both companies will continue operation, according to Schilt, manufacturing a complete line of hand dipped chocolates and hard candies.

• **Curtiss Candy Co.** is increasing the size of its nickel "Baby Ruth" candy bar 22% without increasing the price. The reduction is being made to pass on to customers the savings made possible by mechanical changes, a company spokesman said.

The new bar is being introduced in each territory as retail stocks of the present small bars are cleared, the company said. At first the larger bar will be marketed in the South and Southwest, with national distribution completed by July 10.

Curtiss plans to make a similar size increase in "Butterfinger" bars when new mechanical equipment can be installed, it was added. This will be "sometime, later in the year."

• **Meyer Blumenthal,** one of the original members of the firm of Blumenthal Brothers, Philadelphia, died suddenly at his home on May 17th. He was 62.

Mr. Blumenthal had been associated with the Philadelphia chocolate manufacturing firm for almost half a century, retiring in 1941 after seven years as Production Manager of the Philadelphia plant. Prior to this, he had been New York City Sales Manager for almost twenty years. He was a charter member of the National Confectionery Salesman's Association.

• **Jacob K. Chouljian,** one of the original founders of Peter Paul, Inc., died recently in Waterbury Hospital after a brief illness. He was 58 years old. A director of the candy firm for 25 years, Mr. Choul-

jian took an active interest in the production of Mounds and Almond Joy bars.

• **H. J. Christophersen,** Credit Manager of E. J. Brach and Sons of Chicago, has been elected to the Board of Directors of the Chicago Association of Credit Men for a term of three years.

Mr. Christophersen is a native of Chicago. In 1921 he received the degree of Bachelor of Science in Arts and Sciences from Lewis Institute which is now a part of the Illinois Institute of Technology in Chicago. He also holds the Fellow Award of the National Institute of Credit an activity of the National Association of Credit Men.

Nearly thirty years in Credits is Mr. Christophersen's record, more than twenty-five years with E. J. Brach and Sons.

• **Barton's Bonbonniere** will open two more stores in July and August, it was announced yesterday by Stephen Klein, president. The new units will be at 6 East Twenty-third Street, Manhattan, and 508 Brighton Beach Avenue, Brooklyn. The addition will bring the total number of Barton outlets to forty-nine.

• **Top industry leaders** have been named to the executive committee of the Confectioners Division of the Joint Defense Appeal, it was announced by Hy Becker, vice-president of the Up-To-Date Candy Mfg. Co., chairman of the division.

The members of the industry's executive committee now include: Harry Gurewitz, American Halvah; Nelson Grunther, Banner Candy Corp.; Norman Baumgarten, Barricini, Inc.; Herbert Tenzer, Barton, Inc.; Joshua Pariente, Blumenthal Bros.; Harold Newman, Century Theaters, Inc.; Sheldon Smerling, Confection Cabinet Corp.; Ken Fuchs, Fuchs & Co., Inc.; Maxwell Schneider, Adolph Goldmark Co.; Henry Goldenberg, Hollywood Candy Co.; Harold Jaret, Jaret & Diamond; Ezra Mermelstein; Ira Parnes, Refined Syrups & Sugar Co.; Morty Singer, Singer Bros.; and Harry Pincus, Up-To-Date Candy Mfg. Co.

Meanwhile, plans are moving ahead swiftly for the industry's JDA dinner to be held in the Fall in honor of Joseph E. Shorin, president of Topps Chewing Gum Inc. Announcements will be made in the near future of the date for the affair.

• **Spangler Candy Company** has for the first time included the metropolitan Philadelphia area in its territory, with the appointment of Wheeler-Campie Sales, 2423 West 76th Avenue, Philadelphia 38, Pennsylvania. Robert E. Wheeler and John A. Campie will cover southeastern Pennsylvania, Philadelphia, and southern New Jersey.

• **Cadbury-Fry,** which was erroneously reported in the May issue of MANUFACTURING CONFECTIONER as being a "2 year old firm", is actually 200 years old. The error was made in leaving off the last two zeros.

• **Manufacturer's sales** of confectionery and chocolate products are estimated by the Census Bureau at $80 million for March, 1951.

Reported figures, although slightly above March of last year, were 4 per cent lower than in February. Sales of manufacturer-wholesalers and chocolate manufacturers declined 5 and 9 per cent respectively from the previous month, in contrast with the 20 per cent increase reported by manufacturer-retailers.

Average prices per pound of confectionery and chocolate products for the first three months of 1951 were somewhat higher than last year, as indicated by the sales of 117 manufacturers reporting quantity and value of sales for both years. Dollar sales of these manufacturers increased 13 per cent over last year, compared with a lesser increase of 2 per cent in poundage sales.

• **Manufacturers of confections** in Guatemala, including candy, have petitioned Minister of Economy and Labor, Dr. Manuel Noriega Morales, to request the Congress of Guatemala to ban the imports of confections into Guatemala as a protective measure for local industry. The Manufacturers were joined in their petition by labor unions representing workers in confection plants here.

It is charged that imported items, particularly biscuits and candy, are competitive with Guatemalan produced confections in spite of a high import tax.

It is expected that the proposal will be bitterly contested by Guatemalan importers, who during the past year have unsuccessfully fought similar import restrictions on beer, shoes and some types of textiles.

News of Associations

"Highways Ahead for Wholesalers" was the theme for the sixth annual National Candy Wholesalers Association convention, June 6-9, at the Palmer House in Chicago, Ill.

Edgar J. McCoy of J. B. McCoy & Sons, Inc., was elected president of the association for the coming year. J. V. Balocca, Paola, Kans., past president, automatically became chairman of the board of directors. Peter Kramer, Jr., of Peter Kramer & Son, was elected vice-president.

The first session was devoted to an "Operations Clinic" on the operations problems of the confectionery wholesaling industry. Eight wholesalers representing all parts of the country participated in the panel and discussed ten questions which were proposed by the industry.

Retiring president, J. V. Balocca, in his president's annual address, during the second session, pointed to the importance of wholesaling in the candy industry by noting that "nine out of ten retailers of candy are supplied by wholesalers and that the wholesalers' independent retailer customers sell a billion dollars worth of candy each year." He added that "the potential has barely been tapped."

"You will recall," he stated, "that advertising-minded manufacturers spent millions after the war to keep up consumer demand, only to realize that for the product to sell, it had to be on the retailer's counter. Many discovered that if it were on the counter, impulse buying would take care of the sale even without advertising."

Balocca asked, "Why do the manufacturers not make a difference in the price at which he sells the wholesaler and the retailer in order to allow for the differences in the selling functions which the wholesaler performs? Why does not the manufacturer approach the opening of wholesale accounts from a scientific standpoint, and utilize

only the number of distributors in a market that he needs in order to cover the maximum number of retailers? Why does the manufacturer not maintain a sufficient margin between his price to the wholesaler and the price to the consumer to allow for the necessary costs of the wholesaler and retailer?"

"The answers to these questions, so consistently wrong in the past," he asserted, "have helped to bring about the unprofitable conditions in the wholesale industry today."

The past president called upon the NCWA membership to prove to the manufacturers that "we are his best and most dependable means of distribution."

"The ten-cent bar is not the total answer to the problems of the candy industry," Robert H. Welch, Jr., James O. Welch Co., told the convention during a panel discussion. He pointed out the problem faced by the industry in converting the public to the new price and foretold the future problems that might result from the change. Welch added that if the change was to be made, it must be a concerted action.

In the closing session, a "Sales Clinic" discussion panel took up ten questions submitted by members. John W. Mock, Chicago consultant, summed up the findings of the panel and told the assembly that "knowing what you are talking about" is the key to successful selling.

Over 100 manufacturers reserved space in the NCWA Confectionery Exhibition. The booths were well decorated and attended.

The 1952 NCWA convention will return to the Palmer House the week of May 18.

The Association of Manufacturers of Confectionery and Chocolate held its annual meeting and elections on May 3rd. The following were elected: President—Charles R. Adelson (Delson Candy Co.); Vice-Pres.—George R. Frederick (Loft Candy Co.); Sec.-Treas.—Harry Lustig. Executive Committee: Charles F. Haug, Chairman (Masonau Magenheimer Mfg. Co.); Irvin C. Shaffer (Maillard Corp.); Samuel D. Fried (Korday Candy Co.); Victor A. Bonomo (Gold Medal Candy Co.); Andrew H. Heide (Henry Heide, Inc.); Arthur Baumgarten (Barricini's); Walter McNeill (Wallace & Company); H. R. Burbank (Rockwood & Company); Herbert Tenzer (Barton's); J. S. Swersey (Swersey's); Jack Kastin (Leader Novelty Candy Mfg. Co.); A. Radutsky (Independent Halvah) and Clarence Reid (Charms Company).

CHARLES ADELSON of the Delson Candy Co., re-elected for coming year as president of the New York Association of Manufacturers of Confectionery and Chocolate.

Honorary Life Membership was voted Herman L. Heide (Henry Heide, Inc.) Remainder of the session was devoted to reports from officers and committees and to extended discussions of new pricing regulations and closer relations with the armed force candy requirements. Leading this part of the program was Mr. Phillip P. Gott, of the National Confectioners' Association.

New England Manufacturing Confectioners Association re-elected Richard W. Clare, Vice President of the New England Confectionery Company, president at the annual meeting held on May 7th. Other officers were elected as follows: Vice President: C. E. Worthen, Jr., Vice President and Production Manager, James O. Welch Company, Cambridge; Treasurer: William O. Wallburg, Assistant Treasurer, W. F. Schrafft & Sons Corporation, Charlestown; Secretary: Stephen A. H. Rich, Assistant Treasurer, Squirrel Brand Company Cambridge; Directors: The above and Richard D. Muzzy, Vice President, Daggett Chocolate Co., Cambridge; Harold C. DeLong, Vice President, Gum Products Co., East Boston; Sidney Kier, Plant Superintendent, Royal Confectionery Co., Boston; Walter R. Guild continues as Managing Director of the Association.

Guest speakers were Harry C. Holland, Grocery Products Branch, Office of Price Stabilization, Washington, D. C., who explained the new manufacturers' pricing order; and James E. Mack, Manager of the NCA's office, who gave a brief outline of the Functions of the NCA Washington Office.

The Philadelphia Candy Show sponsored by the manufacturers of Philadelphia was such a huge success it will be repeated this fall, September 23rd to 26th.

King Wins Stroud Jordan Award

The Stroud Jordan Award for 1950 was presented to James A. King, vice president of the Nulomoline division of the American Molasses Co., by the American Association of Candy Technologists at its Third Annual Meeting June 5, at the Stevens Hotel, Chicago. Mr. King was cited for his development of better practical methods in the candy industry and for his many years of practical aid given to members of the industry. King is the first person to receive the award, which was established in commemoration of the contributions made by the late Dr. Stroud Jordan to the confectionery industry. Phillip P. Gott, president of the National Confectioners' Association, made the presentation. An award committee headed by Dr. Katheryn E. Langwill selected Mr. King from the list of nominees submitted by members of the association.

The AACT nominations committee recommended at the business meeting that all officers of the association be re-elected. G. Lloyd Latten, Schutter Candy Division, remains as president. First vice president is Lester Bettes of the Imperial Candy Co.; second vice president is Charles Carilli, Edgar P. Lewis & Sons, Inc.; secretary-treasurer, Hans F. Dresel, Felton Chemical Co. The newly established office of assistant secretary was filled by Edward W. Meeker, American Sugar Refining Co.

ARC Reinstates Officers

The list of officers of the Associated Retail Confectioners remained unchanged following the 1951 convention, June 3-6, at the Drake Hotel in Chicago. George R. Frederick, president of the Loft Corp., was reinstated as ARC president. Also re-elected were Charles Cook, of Cook-Unterecker, first vice president; and Jack Mavrakos, of the Mavrakos Candy Co., St. Louis, as second vice president.

• **The National Confectioners' Association** has moved its offices in Chicago to suite 426, 221 North LaSalle St. The telephone number is unchanged, FRanklin 2-1492.

• **J. Philip Tenenbaum,** Atlanta wholesale confectioner, has been named chairman of the 28th annual convention and candy show of the Southern Wholesale Confectioners' Association, Inc.

Tenenbaum is a member of Tenenbaum Brothers, pioneer Atlanta firm, and is a charter member of the association. He is now serving his second year as Georgia director of the organization.

• **The Confectionery Salesmen's Club of Baltimore** sponsored a "Candy Holiday", June 21st, for jobbers, their salesmen, manufacturers and candy industry employees, at Cottage Grove Beach, Pasadena, Md.

New NCA Officers

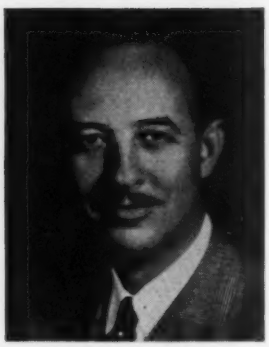
Election of W. W. Cassidy, Sweet Candy Co., Salt Lake City, Utah, as vice president and Richard B. Kimbell, Kimbell Candy Co. Chicago, as secretary-treasurer of the National Confectioners' Association took place at the annual meeting of the NCA Board of Directors during the 68th NCA Annual Convention. Re-elected to office were Philip P. Gott as president and chief executive of the association, Harry R. Chapman, New England Confectionery Co., Cambridge, Mass., and Theodore Stempfel, E. J. Brach & Sons, Chicago, as vice presidents.

Mr. Cassidy's acceptance of the vice presidential post increases the number of NCA vice presidents to three and is recognition of the cooperation given to industry and association activities by the candy manufacturers in the western trading areas. With his re-election, Mr. Gott begins his eleventh year with the NCA.

New members of the NCA Board of Directors, elected by NCA active members in their respective trading areas, are: David L. Clark, The D. L. Clark Co., Pittsburgh; R. H. Hardesty Sr., R. H. Hardesty Co., Richmond, Va.; Raymond R. Meyers, Panburn Co., Inc., Fort Worth, Texas; Louis R. Smerling, Fisher Nut & Chocolate Co., St. Paul, Minn., and Victor A. Bonomo, Gold Medal Candy Corp., New York City, N. Y. Their terms will expire in June, 1954.

Supply Field News

J. J. Kelly



Theron Russell

• **The Package Machinery Company** of Springfield, Mass., announces that as of July 1st, J. J. Kelly of their sales staff will act in the capacity of Field Sales Supervisor, in all territories other than those covered by the New York office.

Lee Evans of their Chicago office will be transferred to the Boston office and will have charge of all sales in the Boston territory and supervise carton machinery sales in the western New England and upper New York territory, the Cleveland and Atlanta territories.

Theron Russell of their Chicago office will handle the carton machinery line in the entire Chicago territory, taking over the accounts formerly handled by Lee Evans in that area.

John W. Andrews of the Springfield office is being assigned to the New York office, which means that four men will operate from that office under the jurisdiction of E. G. Westervelt, Eastern Sales Manager.

• **Dr. R. E. Greenfield,** general superintendent of the A. E. Staley Manufacturing Company since 1946, was elected vice-president in charge of manufacturing operations today by the board of directors of the corn and soybean processing firm.

A Staley employee since 1926, Dr. Greenfield has been a member of the company's board of directors since 1947. The bulk of the company's recently completed $20,000,000 plant modernization program was carried out under his supervision.

• **T. R. Miles** was recently promoted to the position of Production Manager of Wm. J. Stange Co. The announcement was made by H. R. Ansel, Secretary-Treasurer of the firm.

As Production Manager, Mr. Miles will be in charge of the company's three Chicago plants as well as the Oakland, California branch, and will be directly responsible for the manufacture of Stange's three primary products, Cream of Spice Seasoning, Peacock Brand Certified Food Color and N.D.G.A. Antioxidant.

• **Mrs. Prudence Allured,** publisher of The Manufacturing Confectioner and Candy Merchandising, sailed June 26th for a visit to the confectionery industry in England and Europe. She is a delegate to the International Advertising Conference, which meets in London during July.

• **Sterwin Chemicals, Inc.,** a subsidiary of Sterling Drug Inc., has introduced a new standard line of secondary blends of certified food colors.

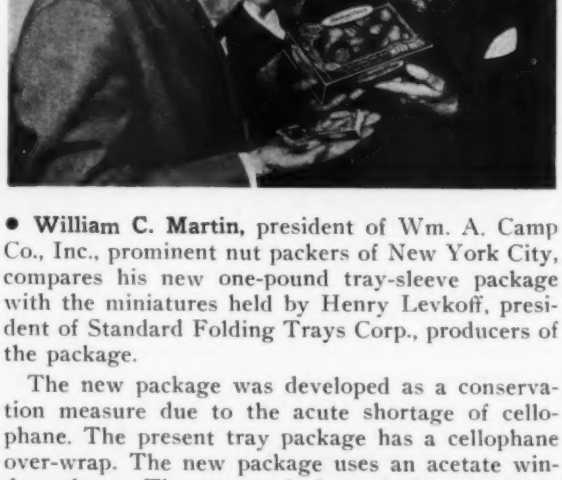
Other secondary blends will be made available as the need for additional colors is established, according to P. Val Kolb, president.

Heretofore, Sterwin has marketed 18 primary colors. The new colors, as well as those previously handled, are for use in confectionery, bottling, baking and other general food industries.

The colors come in one, five and twenty-five pound metal containers and are also custom packed in smaller packages to meet specific demands.

Certified food colors are produced at the Hilton-Davis Chemical Company Division of the Sterling organization, located in Cincinnati, Ohio, where output is currently running at a rate twice that of last year.

• **George E. Dyke,** president of Robert Gair Company, Inc., New York, manufacturers of folding cartons, paperboard and shipping containers, announced that at a meeting of the board of directors held on May 28, David H. Ross, president of Gair Company Canada Limited, Toronto, was elected a director of Robert Gair Company, Inc. He takes the place of George M. Willoughby.



• **William C. Martin,** president of Wm. A. Camp Co., Inc., prominent nut packers of New York City, compares his new one-pound tray-sleeve package with the miniatures held by Henry Levkoff, president of Standard Folding Trays Corp., producers of the package.

The new package was developed as a conservation measure due to the acute shortage of cellophane. The present tray package has a cellophane over-wrap. The new package uses an acetate window sleeve. The tray and sleeve lock securely in place when the tray is closed. The lock is released by applying pressure to either side of the package.

The novel idea of making exact miniatures of the real thing permitted Wm. A. Camp to mail samples to all their brokers before the regular packages were ready. Brokers received the idea with great enthusiasm and requested quantities for window and store displays for their accounts.

• **Dr. Ernest W. Reid** was elected president of the Corn Products Refining Company. Succeeding Morris Sayre who has been elected Vice-Chairman of the Board. Howard G. Wascher who is also retiring as Executive Vice-President has been elected Chairman of the Executive Committee.

Dr. Reid has been Vice-President in charge of the Chemical and Research Division since joining the Company in 1943 and was elected a Director in 1947. Immediately prior to his association with Corn Products Refining Company, he was Deputy Director General of Operations at the War Production Board. He was also a member of the Council of National Defense, Chief of the Chemical Branch of the Office of Production Management, and Director of the Chemical Division of the War Production Board. Dr. Reid is a midwesterner and owns and operates farm properties in the state of Kansas.

A western division headquarters is located in Chicago, Illinois, with branch offices in all large cities. The officers are: Louis J. Woolf, President and Treasurer, Hugo Pulver, Vice President, Charles D. Allen, Vice President, Richard S. Carmel, Vice President, and Robert A. Phair, Secretary. Modern factories are owned and operated at Camden, New Jersey; Broooklyn, New York; Kearny, New Jersey and Clearing, Illinois.

• **George B. Dodd,** President, Hooton Chocolate Company, Newark., N. J. announced the appointment of Mr. Thomas L. Lyall as chief chemist for the Company. Mr. Lyall served as assistant chemist to the time of this recent advancement and he will continue in the capacity of production supervisor for quality control as well as research and development.

• **Gordon Lamont,** retired vice-president and director of sales of the Nestles Chocolate Company, was awarded a solid bronze plaque in appreciation of his long service for the association by the Dairy Industries Supply Association at their annual dinner. Mr. Lamont served as a director for 15 years and is a past president of the DISA.

• **Clinton Foods, Inc.,** Clinton, Iowa, have appointed H. A. Bendixen, formerly sales manager of Primary Bulk Products as General Sales Manager of the Corn Processing Division of the company. A. C. Junge, formerly manager of the Starch Department, will succeed Mr. Bendixen as manager of Primary Bulk Products Department. Both men have been with Clinton Foods their entire business careers. These two men, together with R. A. Swanson, Sales manager of the Feed and Oil Department and Dr. J. N. Newton, manager of the Technical Sales Department, will constitute the executive group in Clinton which will operate the sales in the Corn Processing Division. Walter M. Krafft retired on March 1st as manager of the Chicago office. Mr. Krafft has been with Clinton Foods since 1942. Ray E. Mikkelsen succeeds Mr. Krafft in Chicago.

• **Triangle Package Machinery Co.,** Chicago, announced the purchase of the Bagby Co., manufacturers of filling machines for the dairy and baking industry. The eastern divisional sales offices of the company will be moved from New York City to 1212 Raymond Blvd., Newark, N. J. Walter P. Muskat remains in charge of the division as eastern divisional manager.

• **Bruce Durling,** son of Bill Durling, president and general manager of Wm. J. Stange Co., Chicago, was elected a vice-president at the annual meeting of the board of directors of the company. He has been associated with the company since he spent summer vacations in the plant. Following the last war he became west coast representative and in 1950 became coordinator of sales and research.

• **Crystal Tube Corporation,** Chicago, is moving into its new plant, 6625 West Diversey Ave. around August 1st.

• **American Home Foods, Inc.,** has appointed J. Allen Marshall sales manager of the Burnett products line.

• **U. S. Automatic Box Machinery Co., Inc.** announces a change in representation in the mid-west territory covered from its Chicago office. Clay Willingham, their present sales engineer, is leaving the Chicago area.

The new sales engineer is Mr. Charles Fago, whose appointment is effective June 15th. Mr. Fago is well known in the packaging field, having been for 26 years with American Can Company. He will now represent U. S. Automatic exclusively on the sale of their automatic packaging and paper box making machinery, with headquarters at the Chicago office, 209 West Jackson Boulevard.

• **Charles Triller,** chairman of the board of Wood & Selik, confection import and export, died suddenly at his home in Philadelphia, May 21.

Mr. Triller assumed the chairmanship only one week before his death, upon relinquishing the presidency of the 77 year old concern. He was also chairman of the board of the New York Philharmonic-Symphony Society. He would have been 89 years old on July 15.

CONFECTIONERY BROKERS

New England States

JESSE C. LESSE CO.
Confectionery
Office and Sales Room
161 Massachusetts Ave.
BOSTON 15, MASS.
Territory: New England

Middle Atlantic States

JAMES A. BRADY CO.
1018 Monsey Avenue
SCRANTON 9, PENN.
Phone 2-8658
Concentrated coverage of the candy and food trade in N. E. Penna. "The Anthracite"

ARTHUR M. CROW & CO.
407 Commonwealth Annex Bldg.
PITTSBURGH 22, PA.
Cover conf. & groc. jobbers, chains, dept. stores, food dists.
W. Pa., W. Va., & E. Ohio

JACK HAAZ
6720 Sprague St.—Ge. 8-7593
PHILADELPHIA 19, PENN.
Terr: Penn., N. Jersey, Balt., Wash.

HERBERT M. SMITH
318 Palmer Drive
NO. SYRACUSE, NEW YORK
Terr: New York State

IRVING S. ZAMORE
2608 Belmar Place
SWISSVALE, PITTSBURGH 18, PA.
29 Years Experience
Terr: Pennsylvania, excluding city of Philadelphia

BLOME BROKERAGE CO.
601 Chumleigh Rd.
BALTIMORE 12, MARYLAND
Candy & Novelties
Covering Wholesale Grocers, Candy & Tobacco jobbers, & chains
Terr: Maryland, Virginia, Delaware and District of Columbia

South Atlantic States

JIM CHAMBERS
Candy Broker
84 Peachtree Street
ATLANTA 3, GEORGIA
Terr: Ga., Ala., and Fla.

WALTER C. McGILL & CO.
Candy & Specialties
Box 912, Lynchburg, Va.
Terr: Virginia, No. & So. Carolina

South Atlantic States (cont'd)

WM. E. HARRELSON
Manufacturers' Representatives
5308 Tuckahoe Ave.—Phone 44280
RICHMOND 21, VIRGINIA
Terr: W. Va., Va., N. & S. Car.

ROY E. RANDALL CO.
Manufacturers' Representative
P. O. Box 605—Phone 7590
COLUMBIA 1, SO. CAROLINA
Terr: No. & So. Carolina
Over 25 years in area

BUSKELL BROKERAGE CO.
1135 East Front Street
RICHLANDS, VA.
Contact Wholesale Groceries, Candy Jobbers and National Chains
Terr: Va., W. Va., Eastern Tenn., and Eastern Kentucky

W. M. (BILL) WALLACE
Candy and Specialty Items
P. O. Box 472—111 Rutland Bldg.
DECATUR, GEORGIA
Terr: Ga. & Fla.
Thorough Coverage

SAMUEL SMITH
2500 Patterson Ave. Phone 22318
Manufacturers' Representative
WINSTON-SALEM 4, N. CAROLINA
Terr: Virginia, N. Carolina, S. Carolina

East No. Central States

G. W. McDERMOTT
100 North Raymond St.—Phone 382
MARINETTE, WISCONSIN
Terr: Wisc. & Upper Mich.—covered every five weeks.

ROGER ETTLINGER
Phone Townsend 8-5369
16525 Woodward Ave.
DETROIT 3, MICHIGAN
Terr: Entire state of Michigan

BERNARD B. HIRSCH
1012 N. 3rd St.
MILWAUKEE 3, WISCONSIN
Terr: Wis., Ia., Ill. (excluding Chicago) Mich. (Upper Penn.)

East No. Central States (cont'd)

HARRY KISSENGER
Candy—Novelties—Specialties
3846 McCormick Ave.
Phone Brookfield 9691
Chicago suburb
HOLLYWOOD, ILLINOIS
Terr: Ohio, Mich., & Ind.

W. C. TUGAW
Manufacturers Representative
140 North Dearborn
Chicago 2, Illinois
Covering Metropolitan Chicago

H. K. BEALL & CO.
308 W. Washington St.
CHICAGO 6, ILLINOIS
Phones RANdolph 1618-1628
Territory: Illinois, Indiana, Wisconsin
25 years in the Candy Business

ARTHUR H. SCHMIDT CO
815 Erieside Ave.
CLEVELAND 14, OHIO
Terr: Ohio. Member Nat'l. Conf. Salesmen Ass'n.
Buckeye Candy Club

DONALD A. IKELER
2037 E. Main Street
KALAMAZOO, MICH.
Territory: Michigan

East So. Central States

R. HENRY TAYLOR
Candy Broker
Box 1456—Phone 4-2763
LEXINGTON, KENTUCKY
Territory: Kentucky and Tennessee

A. C. BURNETT COMPANY
Candy Brokers
HALEYVILLE, ALA.
A crack team of six Southern salesmen. Ky., Tenn., Miss., Ala., Fla., Ga., S. C., N. C., Va., W. Va., Ark., La.
If it will sell in Dixie—we can sell it.

FELIX D. BRIGHT & SON
Candy Specialties
P. O. Box 177—Phone 8-4097
NASHVILLE 2, TENNESSEE
Terr: Kentucky, Tennessee, Alabama, Mississippi, Louisiana

J. L. FARRINGER CO.
FRANKLIN, TENNESSEE
Established 1924
Territory: Tenn., Ky., and W. Va.
3 Salesmen covering territory

East So. Central States (cont'd)

HURD-MORELAND CO.
MORELAND, KENTUCKY
Sales Representation Candy bars, Specialties
Terr: Kentucky, East Tennessee

West No. Central States

BUHRER BROKERAGE CO.
Candy Manufacturers' Sales Agents
819 W. Third St.
DAVENPORT, IOWA

ELMER J. EDWARDS CANDY BROKERAGE
5352 31st Ave. So.
MINNEAPOLIS 17, MINN.
Phone: Pa. 7659
Terr: Minn., N. & S. Dak.—Special attention given to Twin City trade

GRIFITHS SALES COMPANY
725 Clark Ave.—Phone GA. 4979
SAINT LOUIS 2, MISSOURI
We specialize in candy and novelties.
Terr: Mo., Ill., and Kan.

O. W. TAYLOR BROKERAGE CO.
McGREGOR, IOWA
Cover confectionery & grocery jobbers, chain-Dept. stores, Food Dist. Nebraska, Iowa, Minnesota Wisconsin.

West So. Central States

W. S. STOKES
Broker & Agent
BATESVILLE, ARKANSAS
Candy - Novelties - Specialties
Terr: Arkansas—Accounts solicited

WM. E. MIRACLE COMPANY
301 No. Market St.
DALLAS TEXAS
Territory: Texas & Oklahoma

Mountain States

CAMERON SALES COMPANY
3000 Monaco Parkway
Denver, Colo.
Dexter 0881
Candy & Allied lines. More than ten years coverage of Colo., Wyoming, Mont., Idaho & Utah

Harvard Nutritionist Hits "Food Faddism"

There are some 60 nutrients necessary for a good diet, Dr. Frederick J. Stare, professor of nutrition at Harvard University, told food editors and home economists at a luncheon held at the Sherry-Netherlands in New York on May 16 and given by the Sugar Research Foundation. "It makes no difference," Dr. Stare stated, "whether we get our nutrients from milk, meat, flour, or sugar, as long as the diet, as a whole, supplies liberal amounts of protein, fats, carbohydrates, minerals and vitamins." He recommended a varied diet, saying "the more varied the diet is, the better the chance that we will be adequately nourished. Foods as they are processed today, in the great variety that come from all parts of the country, make it possible for the great mass of people to have better nutrition than ever before."

Speaking of an emergency diet, in case disaster should come where food supplies would be cut off, such as in an atomic bombing, he said the studies made proved that the first food requirement would be that of calories and pointed out that sugar is the most stable source of supply for calories. The second important requirement of an emergency feeding would be protein, and there he recommended skim milk powder as the most stable source. It had not been feasible at the laboratory to work up recipes or formulas for serving those two basic ingredients to the public in a stricken area. He did recommend that they might be stored in barrels in emergency centers and perhaps made into a thick soup. (Being from out of the candy industry, it would probably not occur to him what that industry might be able to do in presenting an emergency bar made of those two elements, which would be at once a food and palatable as well.)

Dr. Stare did stress the pleasure side of eating, saying it was an important part of nutrition. His subject was that of "Food Faddism", in which connection he said that many people hold to some emotional belief that a special system of eating can make supermen and solve all human problems. "This," he added "is nonsense and defeats the goals of good nutrition."

As to the educational work, he remarked, "The path of progress lies not in reverting to primitive modes of living, but in more and more research to learn what man needs for complete health, more education to teach people in what foods nutrients are found, and to improve methods of preservation and delivering foods to our homes in appetizing form."

Refining of foods, such as sugars and flours, does not necessarily result in any great loss of nutrients found in their natural state. He commented, "We do not need to dose ourselves with all raw foods or those grown by the organic method in order to be perfectly healthy. With complete safety, we can accommodate commercially-prepared foods in our diets.

Dr. Robert C. Hockett, scientific Director for the Sugar Research Foundation, Inc., presided at the luncheon. The Sugar Research Foundation has recently made a grant to the Harvard Department of Nutrition.

• **Clinton Foods, Inc.** gave a weekend Houseboat Party for members of the Candy Production Club of Chicago, June 22-24. Members assembled on the houseboat at Clinton, Iowa.

• **The New England Retail Confectioners** association has announced its new officers for the 1951-52 season. President, Walter Stacy of Hilliard's; 1st vice president, Charles Weiner of Ham's, Inc.; 2nd vice president, Arthur Connelly of Connelly's; treasurer, Ralph Malmgren of Jolly's Ice Cream & Candy; secretary, Dick Rice, Mercken's Chocolate Co.

The MANUFACTURING CONFECTIONER'S Clearing House

HELP WANTED

ENROBER MAN, EXPERIENCED WITH 32 INCH GREER ENROBERS, WANTED, ALSO CHOCOLATE TEMPERING MAN, GOOD PAY.
MARLON CONFECTIONS, CORP.
321 W. 54th St., N. Y. C.

CHOCOLATE PAN MAN, EXPERIENCED, WANTED.
MARLON CONFECTIONS, CORP.
321 W. 54th St., N. Y. C.

MACHINERY WANTED

STEEL STARCH BUCK, complete with motor and Ball Bearing Sieve Eccentrics. Simplex Gas Fire Cooker (Vacuum) with 3 Kettles. Box 711, **The MANUFACTURING CONFECTIONER.**

POSITION WANTED

CANDY MAKER, 35 years experience, looking for a position with all'round pan work, also Chocolate pan work, also chewing gum, jaw breakers, etc., Box 712, **The MANUFACTURING CONFECTIONER.**

CANDY PRODUCTION MAN, been in industry since apprenticeship in Paris at age 15. Knows chocolate and coating manufacture from bean up. Thorough experience in moulding, tray work; can handle large equipment, supervisory background, last 10 years with major European manufacturer. Detailed background upon request. Box 713, **The MANUFACTURING CONFECTIONER.**

MISCELLANEOUS

WE BUY & SELL

ODD LOTS • OVER RUNS • SURPLUS

"Cellophane" BAGS

SHEETS • ROLLS • SHREDDINGS

Cellophane rolls in cutter boxes 100 ft. or more

ALSO MADE OF OTHER CELLULOSE FILM

Wax - Glassine Bags, Sheets & Rolls

Tying Ribbons—All Colors & Widths — **Scotch Tape Clear & Colors**

Diamond "Cellophane" Products

Harry L. Diamond — **Robert L. Brown**
"At Your Service"
74 E. 28th St., Chicago 16, Illinois

CLASSIFIED ADVERTISING

When addressing box numbers, please address as follows:
(Box Number)
The Manufacturing Confectioner
9 South Clinton St.
Chicago 6, Ill.

Classified insertion requests are sent to the same address. Rates are 35c per line of regular type; 70c per line for bold face or capital letters; $6 per column inch for display. Minimum insertion is three lines. Rates are not subject to agency discounts.

MACHINERY FOR SALE

FOR SALE: Three foot cream beater direct motor driven; Display size pulling machine and Laboratory Model Friend hand roll machine. Hobart & Century 3 speed mixers. Bargains. National Confectioners Machinery Co., 108 E. 2nd St., Cincinnati 2, Ohio. Telephone Parkway 1165.

FOR SALE
3—Model K Kiss Machine
1—National Depositor
1—Continuous Feed Fondant Machine
1—Gum Extruder
4—300# National Chocolate Melters
1—5 ft. Cream Beater
Box No. 715
The MANUFACTURING CONFECTIONER.

ONE EVER BEST BATCH ROLL, 7'2" roll, 8'4" over all, used very little, without motor. Box 716, **The MANUFACTURING CONFECTIONER.**

FOR SALE—2 Vertical Beaters, 4 speeds with 2 hp., 3 phase motors. Box 717, **The MANUFACTURING CONFECTIONER.**

Use M.C. Classified Advertising to Sell or Buy Used Equipment.

PLANT FOR SALE

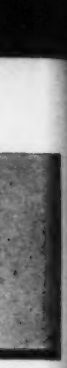
UNUSUAL OPPORTUNITY—Subsidiary large industrial concern owns relatively small but new candy factory in fastest growing section of the United States, with established line of pralines, other candies and nuts, desires to interest experienced, aggressive, capable operator with some knowledge of candy manufacture and sales experience to completely take over business. Offer sale terms but party should have sufficient working capital. Give complete information, experience, references, first letter. Negotiations confidential. Triflers please do not answer. Box 714, **The MANUFACTURING CONFECTIONER.**

CLASSIFIED ADVERTISING
For the Convenience of Our Readers

The Manufacturing Confectioner's classified section is designed to aid candy men in obtaining or disposing of used equipment, services and miscellaneous items. You will find that it pays to read and use the classified section.
In replying to classified ads with box numbers, please address letters to: Box Number, The Manufacturing Confectioner, 400 W. Madison St., Chicago 6, Ill.

Minimum insertion is 3 lines at 35c per line.
70c for bold face; not subject to agency discounts.

THE MANUFACTURING CONFECTIONER
400 W. Madison Street — **Chicago 6, Illinois**



EXCEPTIONAL OFFERINGS
For Sale Piecemeal

EXCELLENT LATE-TYPE MACHINERY & EQUIPMENT
Located in Well Known Mid-Western Candy Plant

At Bargain Prices For Quick Sales

MOST OF THIS EQUIPMENT IS IN PRACTICALLY NEW CONDITION AND HAS HAD VERY LITTLE USE

Equipment was in operation until recently and is still set up in original operating position.

All equipment must be sold and moved immediately.

Quantities are limited and all offerings are subject to prior sale.

ACT PROMPTLY FOR CHOICEST SELECTION

UNION
Rebuilt Machinery
Established 1912

This is an unusual opportunity — that comes once in a lifetime—to secure choice equipment at terrific savings.

INSPECTION INVITED
Can Be Arranged By Appointment

Write—Wire—Phone Collect for Full Details and Prices

If the machines you require are not listed above, please let us know your requirements so that we can quote you from our large stock of modern rebuilt machinery.

MOULDING DEPARTMENT

1—Nat'l Equip. Steel Mogul INSTALLED NEW IN 1949 with automatic Currie Stacker and Loader—NEW IN 1949, and also with
1—Huhn Dryer and Cooler, connected to Mogul with Starch Cleaner and all necessary conveyoring to operate auto. with Mogul. Assortment of single and double Hydro-Seal Pump Bars, NEW IN 1949 and 1950.
1—Currie Center Cleaner.
Approximately 25,000 Standard Starch Boards, standard size.
1—Merrow Cut Roll Machine.
1—Sugar Sander.
1—National Equipment AC Depositor.
1—Racine Depositor.

CREAM AND MARSHMALLOW DEPARTMENT

1—Hohberger Cream Mach. w. Stainless Steel Drum, directly motor driven with motor.
2—Savage 110 gallon Marshmallow Beaters.
2—5 ft. Ball Cream Beaters.

MIXING AND COOKING KETTLES

3—150 gallon Stainless Steel Gum Kettles, motor driven.
2—150 gallon copper Gum Kettles.
1—100 gallon Double Action Mixing Kettle.
3—Double Action S.S. 50 gal. Mixing Kettles.
1—Double Action 60 gallon Kettle.
1—National Equipment EB Cream Re-melter.
4—40 gal. Copper Cook. Kettles, steam-jacket.
1—40 gal. Stainless Steel steam-jacketed Kettle.
1—25 gallon Double Action Gum Kettle.
1—Savage-type open-type Mixer.
1—Baker Perkins Laboratory-type Mixer.
1—Nat'l Equipment 2000 lb. Chocolate Melter.
1—1000 lb. Nat'l Equipment Chocolate Melter.
1—300 lb. Chocolate Melting Kettle.
1—Nat'l Equipment 150 lb. Chocolate Melter.
2—Hobart 80 qt. 4 speed Mixers.
1—Reid Model D Egg Beater, 80 qt. capacity.

PAN DEPARTMENT

37—Revolving Pans with 38" Coils.
13—Revolving Pans without Coils.

WRAPPING DEPARTMENT

1—Pkge. Mach. DF Wrapper, with electric eye.
4—Package Machinery CA2 Wrappers.
1—Pkge. Mach. AA2 Cellophane Wrapper.
1—Lynch Wrap-O-Matic Wrapper, with electric eye and cardboard roll feed.
1—Hayssen Wrapper, 4"-18"
1—Rose 750 RAF Wrapper.
1—Rose 500 RAF Wrapper.
1—Rose 350 RAF Wrapper.

HARD CANDY

1—Nat'l Equip. 600 lb. Continuous Cooker.
2—Simplex Gas Vacuum Cookers.
2—Gable Plastic Machines with heated Sizers and with assortment of chains.
1—Rostoplast Jr., with 4 sets of Dies.
1—Baker Perkins Hard Candy Forming Mach.
1—Racine Model M Sucker Machine.
3—Racine Model H Die Pop Machine.
1—Brack Hard Candy Cutter.
2—4' x 6' Hard Candy Drop Machines.
2—Igou automatic Stick Forming Machines.
2—5 ft. Batch Rollers.
4—3' x 8' Cooling Slabs.
6—3' x 6' Cooling Slabs.

GUM DEPARTMENT

2—Baker Perkins JNM Hydraulic Mixers.
1—Dellenbarger Rolling, Scoring and Cutting Machine for standard size stick.
1—Package Machinery AC AC6 Gum Wrapper for wrapping single stick, and cellophane wrapping 5 sticks.
1—Pkge. Machinery AC6 single-stick Wrapper.
2—AC4 stick gum Wrappers.
2—BB-10 Gum Wrapping Machines.
1—Dellenbarger Extruder.

MISCELLANEOUS

1—Stokes & Smith Tablet Machine.
1—Marco Homogenizer.
1—Caramel Cutter, 24".
1—Nougat Cutter.

UNION CONFECTIONERY MACHINERY CO., INC.
318-322 LAFAYETTE STREET, NEW YORK 12, NEW YORK

Confectionately Yours

A CHICAGO spinster who once was a brilliant lawyer died in poverty last April although she owned a mansion full of riches and new clothes.

Miss Marie O. Andresen, 61, died of a heart attack at the candy factory where she worked for $8 a day for "companionship."

Authorities discovered that she owned a dusty, 17-room mansion stuffed with costly furniture, tapestries and paintings, but lived in one room in its basement without heat, water or electricity.

On her way to work each morning she stopped at a branch library to wash.

Her custom was to wear a man's overcoat over her slip, with a rope as a belt. At the candy factory, where she was a wrapper, she slipped on a smock.

TWO U. S. Army enlisted men, who use a steel helmet for a pot and a bayonet as mixing spoon turn out delicious candy fudge.

They are Sgt. James W. Ringblum, 20, Burlington, Ia., and Cpl. Charles Hicks, Pomona, Calif., who mix up a batch of the candy every day.

SCHOOL authorities in Munich, Germany announced that they had sent back a consignment of candy delivered for student lunches because it arrived in packages bearing the picture of a girl in a scanty bathing suit.

Advertisers' INDEX

Ambrosia Chocolate Co. 56
American Food Laboratories, Inc. ..June '51
American Machine & Foundry Co. 33
American Maize Products Co. .....June '51
Anheuser-Busch, Inc. .....Feb. '51
Armour & Co. .....Oct. '50
Aromanilla Co., Inc., The .....Oct.' 50
Avenex Corp. .....June '51

Bachman Chocolate Co. .....June '51
Baker Div., Franklin General Foods Corp. 17-18
Baker Chocolate and Cocoa, Walter Div. of General Foods Corp. .....June '51
Bernhard Studio, Lucian .....June '51
Baywood Manufacturing Co., Inc. ..June '51
Best Foods, Inc., The .....Dec. '50
Bramigk Co. Ltd. 37
Bramley Machinery Corp. 35
Blanke Baer Extract & Pres. Co. ....June '51
Blumenthal Bros. .....Mar. '51
Buhler Brothers, Inc. 29
Brewer's Yeast Council .....June '51
Burke Products Company, Inc. 59
Burrell Belting Co. 32

California Almond Growers Exchange.... 13
California Fruit Growers Exchange 7, 9, 10
Wm. A. Camp Co. .....June '51
Carle & Montanari, s.a. 8
Fred S. Carver, Inc. .....June '51
Cell-O-Core Corp. .....April '51
Chocolate Spraying Co. 37, 42
Cincinnati Aluminum Mold Co. .....June '51
Cocoline Products, Inc. .....June '51
Colonial Rubber Co. .....June '51
Clinton Foods Inc. .....June '51
Confection Machine Sales Co. 41
Corn Products Refining Co., Inc. ....June '51
Corrigan Co., Inc., J. C. 60
Crest Laboratories .....June '51
Currie Manufacturing Co. 41

J. H. Day Company .....June '51
Diamond Cellophane Products 66
Dodge & Olcott, Inc. 6
R. M. Dubin Corp. .....June '51
Durkee Famous Foods, Div. of Glidden Co. .....June '51

Economy Equipment Co. 42
Exact Weight Scale Co. 34

Ferbo Co. 57
Flitrol Corp. .....June '51
Florasynth Laboratories, Inc. .....June '51
Fritzsche Bros., Inc. 4
Food Materials Corp. .....June '51

Gair & Co., Inc., Robert 56
General Mills, Inc. .....Feb. '51
Glidden Company .....June '51
Groen Mfg. Co. .....June '51
Greer Co., J. W. 42
Givaudan Flavors, Inc. .....June '51
G. M. B. Machinery Co. .....June '51

Hayssen Mfg. Co. 36
Heekin Can Co., The .....June '51
Hooten Chocolate Co., The .....Jan. '51
Hudson-Sharp Machine Co. 38
Hubinger Co. 54

Ideal Wrapping Machine Co. 39

Kiwi Coders Corp. 59
Kohnstamm & Co., Inc., H. 27-28

Land O'Lakes Creameries, Inc. .....Dec. '50
Lehmann Company, Inc., J. M. .....June '51
Lueders & Co., Geo. .....Feb. '51
Lynch Corp., Package Machine Division .....June '51

Magnus, Mabee & Reynard, Inc. ....June '51
Matthias Paper Corp. 57
Mead Sales Corp. .....June '51
Merckens Chocolate Co., Inc. 58
Mill River Tool Co. 38

National Aniline Div. Allied Chemical & Dye Corp. 45-46
National Equipment Corp. .....June '51
National Sugar Refining Co., The ..June '51
Nestle's Chocolate Company, Inc. 58
Neumann-Buslee & Wolfe, Inc. 58
Norda Essential Oil & Chemical Co., Inc. .....4th Cover
Nulomoline Division, American Molasses Company .....June '51
Nussbaum Novelty Co. .....May '51
Nu Deal Paper Box Co. .....June 51

Oakite Products, Inc. 59
Olive Can Company 57

Package Machinery Company 22
Penick & Ford, Ltd., Inc. 61
Pfizer & Co., Inc., Chas. 69
Pitt & Sons Co., The C. M. .....May '51
Polak's Frutal Works, Inc. .....June '51

Racine Confectioners' Machinery Co. 68
Thomas J. Reale 54
Refined Syrups, & Sugars, Inc. 14
Riegel Paper Corp. .....June '51

Savage Bros. Co. 44
Savage Co., R. E. 40
Sheffman, John 39
Solvay Sales Division, Allied Chemical & Dye Corp. .....June '51
Speas Company 55
Staley Mfg. Co., A. E. 11
Standard Casing Co., Inc., The 60
Sterwin Chemicals, Inc. .....2nd Cover
Sugar Information, Inc. .....June '51
Sweetnam, Inc., Geo. H. .....June '51
Swift & Co. .....Oct. '50

Taft Co., R. C. 54
Triumph Mfg. Co. .....June '51

Union Confectionery Equipment Co. 67
Union Starch & Refining Co. .....May '51
U. S. Automatic Box Machine Co. ..Feb. '51

Vacuum Candy Machinery Co. 68
Van Ameringen-Haebler, Inc. 3
Voss Belting & Specialty Co. .....June '51

Weinman Bros., Inc. .....June '51
Werner & Sons, Inc., John 40, 43
White Stokes Company .....June '51
Wood & Selick, Inc. .....June '51
W-E-R Ribbon Corp. 59
Wilbur Sunchard Chocolate Co., Inc. 50

"My family loves fresh peaches—
That's the important reason
I'm thankful that with NORDA PEACH
There's *always* a peach season"

Peach flavor takes no holiday all year, thanks to Norda. Norda Peach Flavor is typical of the taste of fresh, ripe peaches.

Use both Concentrated Genuine and Fine Imitation NORDA PEACH FLAVOR to make better products at lower cost. These are true quality flavors—natural in strength and aroma; concentrated, rich, real peach. They will give you much satisfaction.

Test, taste, and try NORDA PEACH FLAVOR in your mixes, fondants, and syrups. Send for your free samples today—new Norda Flavor Catalogue, too.

Norda Peach . . .
Another "Favorite to Flavor It"

Norda ESSENTIAL OIL AND CHEMICAL COMPANY, INC.
601 West 26th Street, New York 1, N. Y.

CHICAGO • LOS ANGELES • ST. PAUL • MONTREAL • TORONTO • HAVANA • MEXICO CITY • LONDON • PARIS